CLINICAL PRACTICE GUIDELINES

Depression in adolescents and young adults

February 2011

beyondblue
the national depression initiative
www.beyondblue.org.au

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Disclosure of interests

All those invited to become a member of the Expert Working Committee that developed these Guidelines were asked to complete a 'Certification of Disclosure of Interest' form, which advised that there were no conflicts of interest, prior to their being accepted onto the Expert Working Committee.

Throughout the development of the Guidelines, members were requested to advise *beyondblue* and the Expert Working Committee Chair if any potential competing interest arose during the development of the Guidelines; for example, being offered an honorarium (financial or in-kind), or payment for travel expenses, to present at a pharmaceutical company event or conference.

An enquiry by the Chair into any potential or perceived conflict of interest was a standing item at the beginning of every committee meeting, with a thorough explanation provided of what may constitute a potential or perceived conflict of interest.

In the case of a member being an author of a paper under discussion, where it could be seen to present a competing interest, particularly in the development of either a recommendation or a good practice point, members were requested to leave meetings for the duration of the item. This was to avoid the potential for the member to influence any decision made and was duly recorded in the minutes of the meeting.

Any issues that had the potential to present a conflict of interest, such as an invitation to present at a pharmaceutical company-sponsored conference, were addressed by the Chair and member, and managed so as to ensure that no conflict of interest occurred.

The disclosure of interest management process was robust, transparent and drawn to members' attention frequently.

Systematic literature review

The systematic literature review was conducted by Adelaide Health Technology Assessment (AHTA) who jointly own the intellectual property rights in the project material. The report of the review is available from http://www.adelaide.edu.au/ahta/ and should be cited as: Newton S, Docter S, Reddin E et al (2010) *Depression in Adolescents and Young Adults: Evidence Review*. Adelaide: Adelaide Health Technology Assessment (AHTA), University of Adelaide.

Technical writing

Ampersand Health Science Writing was responsible for drafting and editing the Guidelines in consultation with the Expert Advisory Committee.

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Suggested citations

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or

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Publication approval

Australian Government
National Health and Medical Research Council

These guidelines were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 11 February 2011, under Section 14A of the *National Health and Medical Research Council Act 1992*. In approving these guidelines the NHMRC considers that they meet the NHMRC standard for clinical practice guidelines. This approval is valid for a period of 5 years.

NHMRC is satisfied that they are based on the systematic identification and synthesis of the best available scientific evidence and make clear recommendations for health professionals practising in an Australian health care setting. The NHMRC expects that all guidelines will be reviewed no less than once every five years.

This publication reflects the views of the authors and not necessarily the views of the Australian Government.

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Foreword

beyondblue is pleased to issue these *Clinical practice guidelines: Depression in adolescents and young adults*.

The Guidelines are intended as a resource for health professionals and others working with young people aged between 13 and 24 years. Summary resources and companion documents for young people, their families and carers, and for specific groups of health professionals, will be derived from this core document.

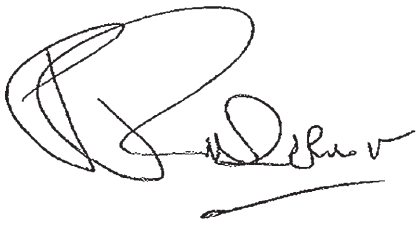
The Guidelines summarise published evidence based on high quality research and make recommendations on key areas of care. Across the continuum of care, there are areas where it is not possible to make evidence-based recommendations, particularly for young adults. In areas for which there is insufficient research evidence for recommendations, the Guidelines include good practice points that are based on lower quality evidence, international guideline documents (e.g. the United Kingdom [UK] National Institute for Health and Clinical Excellence and the American Academy of Child and Adolescent Psychiatrists) and/or best practice clinical judgement. This approach was strongly supported by consumers and health professionals during the public consultation process held in March–May 2010.

The Guidelines were revised extensively after public consultation and have benefited greatly from the thoughtful contributions of a wide range of health professionals, consumers and carers at workshops and through written submissions. The Expert Working Committee acknowledges that further research is required across all areas of care for adolescents and young adults experiencing depression and depressive symptoms. Further, treatment research looking at specific at-risk groups is lacking, as is research in clinical service settings as opposed to more traditional research models. The Expert Working Committee strongly advocates further research investment to address these deficiencies.

The Guidelines are relevant to the work of a variety of professionals in many different settings. Individual use of the Guidelines will depend on the knowledge and skills of the professional involved. Young people and their families and carers should be at the centre of care, wherever it is provided.

The Guidelines will be implemented within the context of existing and emerging activity at national, jurisdictional and local levels, including the whole-of-government approach to mental health embedded within the National Mental Health Strategy. Evaluation of the Guidelines will assess their contribution to changes in practice and potentially to health outcomes.

The Expert Working Committee recognises that implementing the recommendations will have resource implications, particularly in the area of training for the recommended psychological therapies, such as cognitive behavioural therapy and interpersonal psychotherapy. It is hoped that implementation of the Guidelines will lead to discussions between governments, universities and professional organisations about an appropriate focus on and access to psychological therapy training and supervision.



Associate Professor Brett McDermott (Chair)
on behalf of the Expert Working Committee

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Summary

Depression affects the lives of many young Australians. It can seriously lower quality of life for young people and their families, increases the risk of suicide, and often worsens the outcomes of other physical or mental health problems. Up to one in five adolescent girls and one in nine adolescent boys report having high levels of depression symptoms.

Many factors are associated with an increased risk of depression. Whether or not young people develop depression is influenced by the way they manage current challenges, which in turn is affected by their past experiences, personality, stage of development and social and cultural background. Young people who have been through difficult circumstances or feel marginalised by society are particularly at risk — this may include young people who are Aboriginal and Torres Strait Islander, are from a sexual minority and gender diverse group, have resettled in Australia under a refugee program, or are homeless or institutionalised.

Awareness of depression in young people has grown significantly over the past decade. However, depression is still not always identified and even when it is detected, young people may not receive the help they need to recover and stay well. Managing depression can be particularly hard for young people who have other mental or physical health problems, such as alcohol and drug problems, a disability or a chronic illness.

beyondblue developed these Guidelines to assist health professionals to accurately identify and effectively treat depression among adolescents and young adults aged 13 to 24 years. Consumers and carers may also be interested in the Guidelines. The Guidelines are based on the best available current evidence where this exists, and on lower quality research and clinical expertise where it does not.

Key findings

1. *Build resilience and promote help-seeking* — schools, community organisations and workplaces should create environments that promote emotional wellbeing and support young people to seek help if they experience distress or depressive symptoms. School-based prevention programs are likely to reduce stigma and encourage help-seeking, although it is not yet clear if they prevent depression. Prevention programs aimed at young people who are at risk of depression or with depressive symptoms can help to prevent depression from developing.
2. *Provide youth-friendly and culturally responsive health services* — these assist in engaging young people and supporting their involvement in continuing care. Health professionals should take the time to establish rapport, explain confidentiality issues and build trusting relationships with young people. Generally, it is helpful to involve the young person's parents or carers, but this depends on the individual's age, wishes and circumstances.
3. *Understand the context as well as assess for symptoms* — it is important to look at the whole picture for the individual and to help young people make sense of normal feelings, such as sadness or grief, as well as assessing whether or not they meet the clinical criteria for a depressive disorder. A diagnosis should be seen not as a 'label' but as a 'flag' to guide further action. To ensure the young person's immediate safety, this should include assessment to find out if there is a risk of suicide.
4. *Decide on the level and type of support needed* — this will depend on the severity of symptoms and the young person's circumstances. Guided self-help, non-directive support, information and lifestyle advice are useful initial approaches that can also supplement other treatments. Health professionals should maintain the treatment relationship and monitor the young person's progress, whether they provide treatment or refer the young person to a mental health specialist.
5. *Work collaboratively with the young person (and if appropriate his or her parents/carers) to develop an effective management plan* — in most cases, psychological or 'talking' therapies (cognitive behavioural therapy or interpersonal psychotherapy) should be the first treatment for young people with diagnosed depression. If symptoms are severe, or if symptoms are moderate to severe and psychological therapy has not been effective, is not available or is refused, prescription of the selective serotonin reuptake inhibitor (SSRI) antidepressant fluoxetine should be considered for reducing depression symptoms in the short term.

6. *Take all relevant factors into account when deciding about treatments* — decisions are made on a case-by-case basis, considering the young person's preferences and situation, and with full discussion of what the treatment involves (including likely benefits and possible adverse effects). Any problems that might make treatment less likely to succeed should be reviewed and dealt with where possible. Health professionals, young people and their families should be aware of the dangers of not treating moderate to severe depression — depression is the major risk factor for suicide.
7. *Monitor closely if SSRI antidepressant medication is prescribed* — because of an increased risk of suicidal thinking after antidepressants are first taken, the young person requires close medical monitoring, especially during the first 4 weeks. This risk is lower when combined treatment with medication and psychological therapy is used.
8. *Maintain treatment for an adequate length of time* — even after symptoms lessen, active treatment should continue for at least 6 months. If the chosen treatments do not reduce symptoms, the diagnosis and the young person's situation may need to be reviewed. Where there is doubt about how to proceed, specialist advice or a second opinion should be sought. Recurring depression requires longer term management, involving monitoring and advice on strategies for staying well.
9. *Aim for integrated care of young people with recurrent depression, co-occurring conditions or bipolar disorder* — young people with complex problems may need a number of interventions, delivered by different health professionals. The most practical and suitable methods, format and timing will differ for each young person. Having one health professional acting as case manager, with collaboration between all health professionals involved, will help to ensure integrated, continuous care. Managing bipolar disorder is likely to involve a detailed, individually tailored management plan that sets specific treatment goals for the long term, including appropriate medications and education about early warning signs and triggers.

The way in which different health professionals use these Guidelines will vary depending on their knowledge, skills and role, as well as the setting in which care is provided. More research is needed in every area to improve the evidence for prevention and treatment and reduce the burden of depression in young people.

Summary of recommendations

The recommendations in these Guidelines were developed by the Expert Working Committee (see Appendix 1) based on systematic review of evidence published before the end of November 2008. Evidence that was graded A or B according to the National Health and Medical Research Council (NHMRC) gradings (see below) was formulated as recommendations. Evidence graded C or D was not used to form recommendations, as evidence of this level must be applied with caution.

Good practice points (GPPs) were developed to cover areas that had been addressed in the systematic literature review (SLR) but where insufficient evidence to support a recommendation was identified, as well as areas that were beyond the scope of the SLR but where practical advice is needed. The GPPs do not reflect studies that were graded C or D. Rather the GPP classification indicates guidance that, at this stage, does not meet the scientific rigour of a formal recommendation. The formulation of GPPs involved a process of:

- identifying areas where advice was required (e.g. raised by other guidelines, Committee members or through the consultation process);
- reviewing any evidence identified through the SLR;
- drafting of a GPP by members with expertise specific to the area; and
- refinement of the GPP by the whole Committee over several iterations until consensus was reached.

Definitions of grades of recommendations

Grade	Description
A	Body of evidence can be trusted to guide practice
B	Body of evidence can be trusted to guide practice in most situations
C	Body of evidence provides some support for recommendation(s) but care should be taken in its application
D	Body of evidence is weak and recommendation must be applied with caution

Source: NHMRC (2009).

Recommendations		Grade
1	Psychosocial interventions of the types investigated to date are not currently recommended for universal prevention of depressive symptoms or major depressive disorder in the adolescent population. More research is needed to identify effective approaches.	A
2	For children who experience a family-related risk factor for depression, family-focused interventions should be considered for the prevention of major depressive disorder in adolescence.	B
3	Cognitive behavioural interventions should be considered for short-term symptom reduction in adolescents with identified depressive symptoms who do not meet diagnostic criteria for major depressive disorder.	B
4	Cognitive behavioural therapy (CBT) or interpersonal psychotherapy (IPT) should be considered as first-line treatment for adolescents with major depressive disorder.	B
5	Prescription of the selective serotonin reuptake inhibitor (SSRI) fluoxetine should be considered for acute, short-term reduction of depressive symptoms in adolescents with moderate to severe major depressive disorder, where psychological therapy has not been effective, is not available or is refused, or if symptoms are severe.	B
6	CBT may be added to/continued with SSRI therapy, to reduce the risk of suicidal thinking and improve functioning in adolescents with major depressive disorder.	B

Recommendations (cont)		Grade
7	Tricyclic antidepressants should not be used for treating major depressive disorder in adolescents.	B
8	Young people should be monitored for the onset of or increase in suicidal thinking following initiation of SSRIs.	B

Recommendations and good practice points

The following table lists the recommendations and good practice points developed by the Expert Working Committee for the prevention and clinical care of depression in young people.

Prevention		Grade	Section/page
Rec 1	Psychosocial interventions of the types investigated to date are not currently recommended for universal prevention of depressive symptoms or major depressive disorder in the adolescent population. More research is needed to identify effective approaches.	A	B2.2.1; p19
Rec 2	For children who experience a family-related risk factor for depression, family-focused interventions should be considered for the prevention of major depressive disorder in adolescence.	B	B2.2.2; p19
Rec 3	Cognitive behavioural interventions should be considered for short-term symptom reduction in adolescents with identified depressive symptoms who do not meet diagnostic criteria for major depressive disorder.	B	B2.2.3; p20
GPP 1	Given the lack of evidence in young adults, it is strongly recommended that strategies to prevent major depressive disorder in this age group be a focus for continuing research.		B2.3; p21
GPP 2	Preventive strategies in young adults should be guided by findings in adolescents until more evidence is available.		B2.3; p21

Engagement and therapeutic relationship		Section/page
GPP 3	Health professionals involved in the care of young people must take the time to build strong therapeutic relationships, which will form the basis of continuing care.	C1.2; p27
GPP 4	Young people are acutely aware of confidentiality issues. Health professionals should have a clear understanding of such issues and the training and skills to discuss confidentiality with young people.	C1.3; p29
GPP 5	In most cases it is beneficial to involve the young person's parents/carers in discussions about his or her care. However, the degree of involvement will depend on the young person's age, stage of development, wishes and circumstances.	C1.4; p29

Assessment		Section/page
GPP 6	With the young person's consent, multiple informants should be involved to assist in identifying possible causes of the young person's distress and providing information about any changes in his or her behaviour or functioning.	C2.1.1; p33
GPP 7	A diagnosis of major depressive disorder is based on clinical judgement, including consideration of the young person's level of impairment and whether symptoms are consistent with accepted diagnostic criteria (DSM-IV-TR; ICD-10).	C2.2; p37
GPP 8	Assessment for risk of suicide is an immediate task if depressive symptoms are identified in a young person, with involvement of parents/carers where possible.	C2.3; p42

Developing the management plan		Section/page
GPP 9	Health professionals should provide a good standard of care at all times including maintaining the therapeutic relationship, discussing symptoms and problems, continuing contact, and encouraging a collaborative approach.	C3.1; p47
GPP 10	Health professionals, young people and parents/carers must be aware of the dangers of not treating episodes of moderate to severe depression. Depression is the major risk factor for suicide.	C3.1; p47
GPP 11	Development of the management plan should be person-centred, involving consideration of physical, mental, family, social, spiritual and cultural factors relevant to the young person.	C3.1; p47
GPP 12	Treatment decisions should be based on the findings of assessments, taking into account the severity of symptoms, response to any previous treatments and co-occurring conditions, as well as the young person's circumstances, preferences and resources.	C3.1.2; p49
GPP 13	A multidisciplinary team approach is likely to have advantages for individuals with complex presentations.	C3.1.2; p49
GPP 14	The length of treatment required for effective remission varies. Depressive conditions may require up to 36 weeks of active treatment.	C3.1.2; p49

Psychological therapy — major depressive disorder		Grade	Section/page
Rec 4	Cognitive behavioural therapy (CBT) or interpersonal psychotherapy (IPT) should be considered as first-line treatment for adolescents with major depressive disorder.	**B**	C3.2.1; p50
GPP 15	In the absence of more substantial evidence on treating depression in young adults, it is reasonable to extrapolate from the evidence on psychological therapy in adolescents (see Recommendation 4).		C3.2.1; p50
GPP 16	While CBT and IPT have high acceptability among young people with depression, consideration should be given to the young person's suitability to undertake psychological therapy.		C3.2.4; p53
GPP 17	CBT and IPT should be provided by professionally trained CBT/IPT therapists who have experience in working with young people. It is important that the therapy is applied in line with evidence-based practice manuals. Continuing maintenance of therapy skills is essential.		C3.2.4; p53

Pharmacological treatment — major depressive disorder		Grade	Section/page
Rec 5	Prescription of the selective serotonin reuptake inhibitor (SSRI) fluoxetine should be considered for acute, short-term reduction of depressive symptoms in adolescents with moderate to severe major depressive disorder, where psychological therapy has not been effective, is not available or is refused, or if symptoms are severe.	**B**	C3.3.1; p53
Rec 6	CBT may be added to/continued with SSRI therapy, to reduce the risk of suicidal thinking and improve functioning in adolescents with major depressive disorder.	**B**	C3.3.1; p53
Rec 7	Tricyclic antidepressants should not be used for treating major depressive disorder in adolescents.	**B**	C3.3.1; p53
GPP 18	In the absence of more substantial evidence on treating depression in young adults, it is reasonable to extrapolate from the evidence on pharmacological treatment in adolescents (see Recommendations 5, 6 and 7).		C3.3.1; p53
GPP 19	SSRIs are not recommended for treating young people with mild depression.		C3.3.1; p53
GPP 20	Prescription of an SSRI must occur within the context of an ongoing therapeutic relationship and management plan.		C3.3.2; p56
GPP 21	To enable informed consent to pharmacological treatment, young people must be given information on adverse effects (including the possibility of emergence or escalation of suicidal thinking) and the need for ongoing monitoring during treatment.		C3.3.3; p57
GPP 22	Pharmacological treatments need to be prescribed by those trained to do so, who are very familiar with the range of adverse effects and able to appropriately monitor the young person. Where necessary, expert advice should be sought before prescribing, or the young person should be referred to a mental health service or psychiatrist.		C3.3.4; p59
Monitoring			
Rec 8	Young people should be monitored for the onset of or increase in suicidal thinking following initiation of SSRIs.	**B**	C3.3.4; p59
GPP 23	Close monitoring of symptom severity and adverse effects is required for young people taking an SSRI, especially during the first 4 weeks.		C3.3.4; p59
GPP 24	A protocol for managing suicidal thinking must be in place for every young person who is taking an SSRI, including baseline assessment and regular monitoring for suicidal thinking.		C3.3.4; p59
GPP 25	Health professionals should be aware of the risk that a manic episode may be precipitated following initiation of SSRIs. For young people with depressive episodes and a history of mania or mixed presentations, a mood stabiliser may be required.		C3.3.4; p59

Continuing treatment — major depressive disorder		Section/page
Inadequate response to treatment		
GPP 26	If a young person does not respond to an adequate treatment dose (psychological therapy and/or pharmacological treatment) after an appropriate period of time, the diagnosis should be reviewed and consideration given to co-occurring conditions, drug or alcohol misuse or ongoing adverse circumstances.	C4.1; p65
Continuation and maintenance therapy		
GPP 27	While there is a small evidence base, current good clinical practice suggests continuing medication therapy for 6 months post-remission.	C4.2.1; p66
GPP 28	Where SSRI medication is warranted, a combined SSRI plus CBT/IPT approach appears to provide the most effective care. If a moderate to severe depressive disorder fails to respond to combined therapy, specialist advice or a second opinion should be sought.	C4.2.1; p66
GPP 29	If discontinuation of treatment is planned, consideration needs to be given to factors that may contribute to relapse and recurrence.	C4.2.2; p67
Severe or recurrent depression and/or co-occurring conditions		
GPP 30	Complex presentations may require a longer assessment phase and multiple interventions delivered by different health professionals. Overall case management by one health professional is advisable.	C4.4.1; p68
GPP 31	Electroconvulsive therapy (ECT) may be considered in rare cases, such as treating severe depression with psychotic features where other approaches have not been successful.	C4.4.2; p69
GPP 32	If inpatient care is required, admission should be to an environment designed for young people wherever possible.	C4.4.3; p70

Management of bipolar disorder		Section/page
Psychological therapy		
GPP 33	Psychoeducation and psychological interventions to improve management and assist with coping skills and psychosocial functioning are valuable adjuncts to pharmacological treatment.	C5.1.1; p71
Pharmacological treatment		
GPP 34	Considerations in decision-making about pharmacological treatments include past history of mania or family history of bipolar disorder, severity of symptoms, need for short-term stabilisation, previous dosage regime and adherence to treatments, and reasons for any non-adherence.	C5.1.2; p72
GPP 35	Serious agitation may require adjunctive medication, consistent with local prescribing protocols. If the patient is less unwell, lithium can be the initial drug of choice.	C5.1.2; p72
GPP 36	Short-term medication is generally required for acute mania, preferably with rapid-acting anti-mania medications.	C5.1.2; p72
GPP 37	Medication used for short-term stabilisation (e.g. for agitation) should be tapered and discontinued.	C5.1.2; p72
GPP 38	If symptoms are severe or the young person does not respond to treatment, combination pharmacological treatment is justified.	C5.1.2; p72
GPP 39	Specialist input should be sought for the care of young women with bipolar disorder who are considering pregnancy, pregnant or in the postpartum period.	C5.1.2; p72
Continuing treatment and relapse prevention		
GPP 40	A consistent, long-term, flexible relationship between the young person, his or her parents/carers and one health professional is ideal for outpatient care in young people whose condition has been stabilised. Young people's family members should feel comfortable contacting the health professional to report escalations of symptoms or other emergencies.	C5.2; p74

Notes: Rec: recommendation; GPP: good practice point.

Introduction

Mental illness is the main contributor to the burden of disease and injury among young Australians, responsible for nearly half of disability-adjusted life years (DALYs) lost in those aged 15 to 24 years (AIHW 2007). Depression and anxiety, together with substance use disorders, are the most common mental illnesses in young people, and account for three-quarters of the burden of all mental illness in this age group (Andrews & Wilkinson 2002).

Clinical practice guidelines: depression in young people

National Health and Medical Research Council (NHMRC) *Clinical Practice Guidelines on Depression in Young People*, published in 1997, were rescinded in 2004. Acknowledging the need for up-to-date guidelines in this area, the *beyondblue* Board committed funding and resources for the development of guidelines on depression in young people. The initial intention was to revise and update the NHMRC 1997 guidelines; however, an early decision of the Expert Working Committee was that new guidelines were required, in light of new data, burgeoning research in the area and changes in community awareness, policy and services over the last decade.

These 2011 Guidelines make recommendations for preventing, identifying, treating and managing the symptoms of depression in adolescents and young adults, with the aim of improving health outcomes among young people who are at risk of depression, have experienced depressive symptoms or have been diagnosed with depression.

Need for the Guidelines

Despite gains in understanding of the mental health of young people, depression is still not well identified in primary care settings and even when it is detected, many young people with depression receive no treatment.

Young people most often seek professional help from school counsellors and general practitioners. It is important that all health professionals are able to accurately identify young people at risk of depression or with depressive symptoms, provide emotional support and appropriate treatment, and refer young people for specialist help when necessary.

Scope of the Guidelines

The Guidelines cover the spectrum of depressive disorders including dysthymia, major depressive disorder and bipolar disorder. While the focus of the Guidelines is on depression, related issues such as substance use disorders and self-harm are considered as co-occurring conditions or related phenomena that require discussion. As an issue of current concern, use of antidepressant medication in young people under 25 years of age and its reported association with suicidal thinking is given specific attention.

The following are not included in the Guidelines:

- first episode psychosis;
- the specific management of patients with other physical or non-mood psychiatric conditions (co-occurring conditions); and
- depressive disorders with no published outcomes in the specified age range.

The diagnosis and pharmacological treatment of paediatric bipolar disorder is outside the age scope of these Guidelines. Paediatric bipolar disorder is mentioned where appropriate, however, discussion should not be seen as validation of a condition that the Expert Working Committee considers to be very rare.

Age range

Although the focus of these Guidelines is the age group 13 to 24 years, the research findings are presented in two age groupings — 13 to 18 years and 19 to 24 years. The systematic literature review (SLR) found that the 13 to 24 age group is not a developmental stage that is reflected in published literature as it does not conform to the medical subject headings (MeSH) used to classify scientific literature. It is therefore not technically possible to examine the scientific literature across this age range as a single group. The scientific foundations of the recommendations for 13 to 18 year olds are based on a greater number of published studies than those for 19 to 24 year olds.

Recommendations are given for 19 to 24 year olds where evidence for this specific age group could be extracted from the scientific literature. In the absence of evidence specific for this age group, it is reasonable to extrapolate findings from research in 13 to 18 year olds. Readers are also advised to consult documents that have reviewed adult literature (defined in MeSH as 'adults') for further guidance about the 19 to 24 age group.

Most adolescents congregate and therefore present with concerns in the home and in various school settings, and older youth do so in employment or further education settings. Discussion concerning the 13 to 18 age group will thus be of interest to health professionals who see secondary school students and to teachers. Discussion relating to the 19 to 24 age group will be of interest to health professionals who see young adults, to employers (including employers who have trainee placements), and to further and higher education providers.

Where the evidence is specific to adolescents (aged 13 to 18 years) or young adults (aged 19 to 24 years), these terms are applied. General discussion referring to both groups uses the terms 'youth' or 'young people'.

Intended audience

The intended audience for the Guidelines is:

- health and other service providers who contribute to the care of young people, including general practitioners (GPs) and other clinicians (e.g. paediatricians); psychiatrists, psychologists, mental health nurses and other mental health professionals; and nurses, community healthcare workers and Aboriginal and Torres Strait Islander Health Workers; and
- school counsellors, teachers, school psychologists and others working in schools or education to support the mental health and wellbeing of students.

Young people, their families, carers and friends may be interested in this core document; however, *beyondblue* will also develop specific companion materials and resources for consumers and carers.

Development of the Guidelines

An Expert Working Committee convened by *beyondblue* developed the Guidelines (membership is listed in Appendix 1). Through the formal consultation process, a wide range of experts, stakeholders and consumer representatives also informed development of the Guidelines. Appendix 2 outlines the process undertaken.

Evidence base for the Guidelines

beyondblue commissioned Adelaide Health Technology Assessment (AHTA) to conduct systematic literature reviews to provide the evidence base for these Guidelines. The reviews aimed to identify risk and protective factors for depression, how depression can be prevented and treated, and how risk factors have an impact on outcomes, in the population of adolescents and young adults.

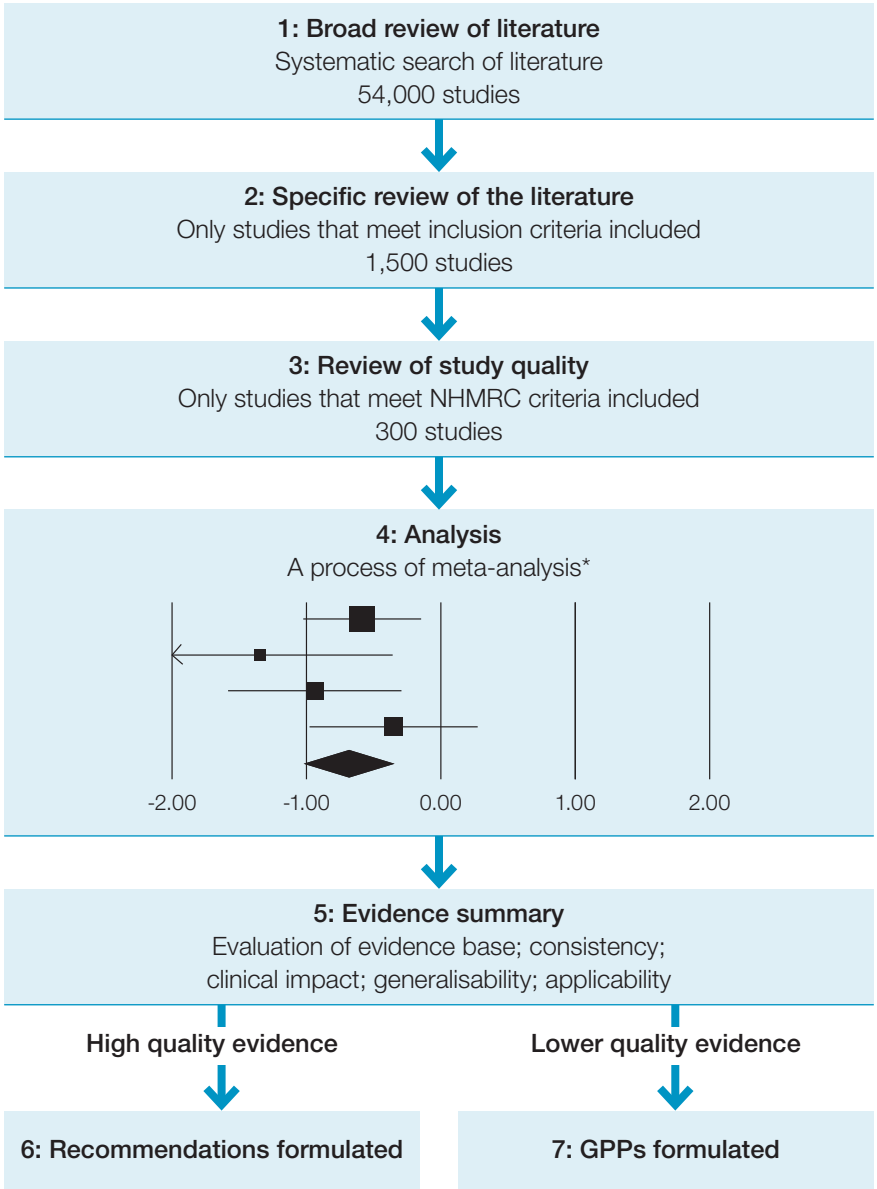
The process undertaken was as follows (see also Figure 1):

1. A systematic search of medical, psychological and educational literature potentially relevant to depression in adolescents and young adults was conducted.
2. Titles and abstracts of studies were reviewed and studies included if they reported on a population intervention (treatment or risk factors), a comparator (against which the intervention's effectiveness was measured) and outcomes of interest.
3. Remaining studies were reviewed and included if depressive symptoms were measured, the main target of treatment was depression or preventing the development of depression, and, for questions pertaining to treatment, the majority of participants had a diagnosis of depression and the remaining participants had symptoms of depression.
4. A process developed by the NHMRC was used for assessing the body of evidence. This involved applying critical appraisal templates of study validity and statistical and clinical relevance. As well, individual studies addressing the same treatment question (e.g. cognitive behavioural therapy [CBT] versus treatment as usual for adolescents with depression, outcomes measured 6 months post-treatment) were combined to generate a summary treatment–effect statistic. For many areas of interest there were no studies in the adolescent or young adult age range, or studies were excluded due to poor methodology.

5. Evidence statements were developed based on a rating of: the evidence base (in terms of the number of studies, level of evidence and quality of studies); the consistency of the study results; the potential clinical impact of the proposed recommendation; the generalisability of the body of evidence to the target population for the guideline; and the applicability of the body of evidence to the Australian healthcare context.
6. Evidence statements that were graded A or B, which can generally be trusted to guide practice, were formulated as recommendations.
7. Evidence statements graded C or D were not used to form recommendations, as evidence of this level must be applied with caution. For areas of clinical practice where evidence is lacking or limited but where practical advice is needed, the Expert Working Committee developed good practice points (GPPs) based on any available evidence and clinical consensus.

For some treatment questions there was very little or no evidence. For those examples, the Expert Working Committee has advised *beyondblue* of the need for further research. Research priorities are outlined in Part D.

Figure 1 Development of recommendations and good practice points



*A meta-analysis is a statistical procedure that creates a single conclusion from a combination of many studies.

Appendix 3 provides a more detailed discussion of the systematic literature review and recommendation development process.

Interpretation of the evidence and application of the Guidelines

The following issues relevant to interpretation of the evidence and application of the Guidelines should be noted.

- *Difference between lack of evidence and lack of evidence of effect* — There is an important distinction between lack of evidence that implies no or very few studies available to review, and lack of evidence of effect. A principle of evidence-based medicine is that evidence is more robust if results have been replicated by several studies across different sites and from different research teams. Lack of evidence of effect means the summation of known research, combined in a rigorous process (e.g. a systematic literature review) found no evidence that the intervention was effective. To this end, clinical practice guidelines, including these Guidelines, may include A or B grade evidence that an intervention is not effective.
- *Efficacy versus effectiveness* — Efficacy is the extent to which a specific intervention or treatment produces a beneficial effect under ideal conditions (Last 2001). Effectiveness is similar, except that the intervention is used in the field, in routine circumstances and the effect is as intended for the specified population (Cochrane 1972). In the context of the Australian healthcare system, these Guidelines will ideally guide the routine practice of mental health interventions with adolescents and young adults in real world settings. Care is therefore necessary, given that most evidence is generated in highly controlled settings, and studies with the most comprehensive participant exclusion criteria are often the most difficult to generalise to clinical practice settings.
- *Application of the recommendations* — The recommendations in the Guidelines usually apply to the 'average' patient and may be expected to apply to most individuals presenting with a form of depression, most of the time. Guidelines still require health professionals to tailor management to the individual, and to consider contextual factors at the time of presentation.

Implementation, monitoring and review

The dissemination processes and channels of *beyondblue* will be used to widely disseminate the Guidelines and accompanying documents to the relevant agencies and individuals. This will include health professionals, consumers and carers, and policy makers who are involved in influencing youth mental health policy and practice. Summaries of the Guidelines and commentaries will be published in appropriate journals, and practical guidance for specific groups will be derived from the Guidelines.

The context within which the Guidelines will be implemented has changed considerably since the previous guidelines were published in 1997. As well as a surge in published studies both in Australia and internationally over the past decade, there is widespread activity at national, jurisdictional and local levels, including national and jurisdictional policies (e.g. the Fourth National Mental Health Plan 2009–2014), programs and resources developed by organisations (e.g. *beyondblue,* headspace, Black Dog Institute) and a range of self-help, support and advocacy services and resources at the local level. *beyondblue* is extremely well placed to instigate and foster communication between the Guideline developers and communities of practice and interest in youth mental health.

It is likely that the situation will continue to change rapidly as research in this area keeps expanding. The intention is that these should be 'living' Guidelines, with the online version periodically updated to include higher-level evidence as it becomes available. It is anticipated that major review of the evidence will be undertaken within 5 years.

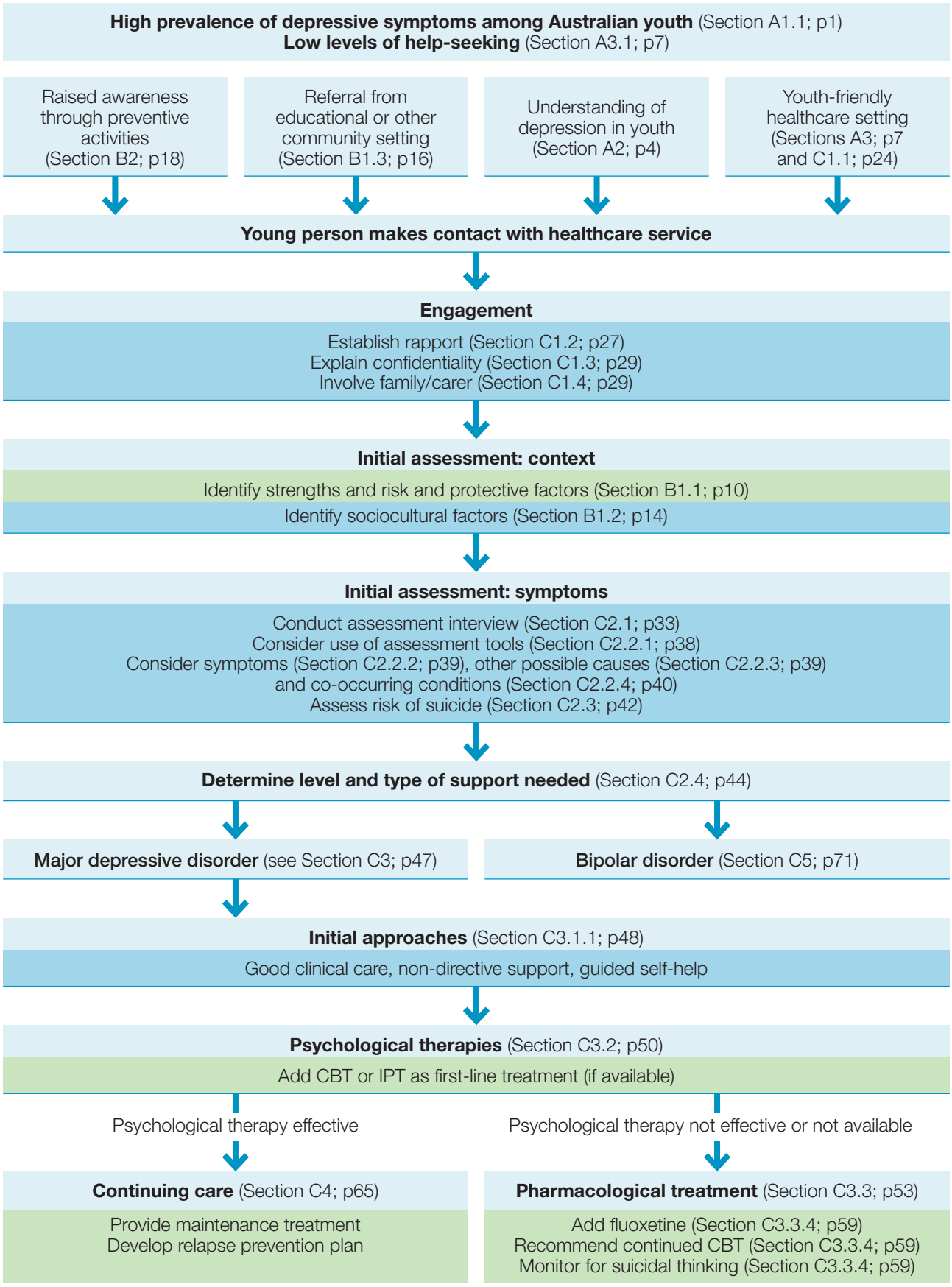
beyondblue has appointed an independent evaluator to assess the usefulness and uptake of the Guidelines, and to identify changes in clinical practice as a result of the release of the Guidelines.

Structure of the Guidelines

The Guidelines are in four parts:

- **Part A** gives a general overview of depression in young Australians, including a discussion of depression in the context of adolescence and young adulthood, the significance of the problem and key issues in identifying and treating depression in young people.
- **Part B** discusses risk and protective factors for depression in young people, and outlines current evidence on preventive interventions (universal, selective and indicated).
- **Part C** summarises the evidence on managing depression in young people, maintenance and relapse prevention and management of bipolar disorder.
- **Part D** discusses future research and development.
- The **appendices** provide further information about the development of the Guidelines, including the methodology for the systematic literature review and the public consultation process.

Figure 2 Orientation to the Guidelines



Key: Discussion based on evidence from the SLR is highlighted in green; discussion based on lower quality evidence, international guidelines and/or best practice clinical judgement is shaded in dark blue.

PART A Overview

This part of the Guidelines gives a general overview of depression in adolescence and young adulthood, based on recent review articles, international guidelines and information from Australian surveys and data collections.

Section A1 gives a brief epidemiological background (from a population perspective) of depression among young people in Australia, including prevalence (in the general population and in groups at higher risk of depression), mortality and related health service use.

Section A2 discusses depression in the context of other issues facing young people, and outlines signs and symptoms, the spectrum of depressive disorders and common co-occurring conditions.

Section A3 includes a narrative discussion of barriers and facilitators of help-seeking by young people and provision of effective mental health care services to young people.

A1 Depression among young people in Australia

A1.1 Prevalence and mortality

A1.1.1 Prevalence

Surveys in many countries have reported that children, adolescents and young adults experience relatively high rates of mental health problems and mental illness (Verhulst et al 1997; Raphael 2000; NICE 2005; Bhatia & Bhatia 2007). It is estimated that one in five adolescents will experience a depressive episode by the age of 18 years (Lewinsohn et al 1998; Hankin 2006), with females more likely to experience depression than males (Costello et al 2002; Patton et al 2008). An apparent rise in adolescent mental health problems has been attributed to an increased proportion of children exposed to early life stresses such as child abuse and neglect (Silburn & Zubrick 1996). However, it may also be that the perception of increased prevalence arises from greater awareness of a disorder that has long been under-diagnosed by health professionals (Costello et al 2006).

In Australia, there are few national data sources that describe the mental wellbeing of children and young adults. The National Survey of Mental Health and Wellbeing in 1997 found that about 1 in 25 people aged 13 to 17 years (around 4%) had experienced a depressive disorder (major depressive disorder or dysthymia [chronic mild depression]) over the previous 12 months (Sawyer et al 2000). A later national survey found that nearly 2 in 20 females (8.4%) and 1 in 20 males (4.3%) aged 16 to 24 years had experienced an affective disorder (including depressive episode, dysthymia and bipolar disorder) in the previous 12 months (ABS 2008).

Depressive symptoms, rather than a full diagnosis of depression, are much more common. A statewide survey of secondary students in Victoria found that girls (23%) are twice as likely as boys (12%) to report high levels of depressive symptoms. Depressive symptoms increased with age, from 13% in Year 7 students to 20% in Year 9 and 22% in Year 11 (Bond et al 2000).

The higher rates among females may partly reflect greater reporting of depressive symptoms by females than males.

Specific groups with a higher prevalence of depression

Data on prevalence of depression among specific population groups is limited, although a range of studies and data collections suggest that depression is more prevalent in certain groups. The list below is not complete, but rather reflects available published research. It is highly likely that many other groups (e.g. young people in unstable foster care) also have raised rates of depression.

- *Aboriginal and Torres Strait Islander youth* — In general, Aboriginal and Torres Strait Islander people experience higher rates of both social and emotional wellbeing problems and some mental health disorders than other Australians (Social Health Reference Group 2004). Available data specific to youth show that in 2004–05, Aboriginal and Torres Strait Islander Australians aged 12 to 24 years (in Queensland, Western Australia, South Australia and the Northern Territory) were hospitalised for mental and behavioural disorders at 1.6 times the rate of other young Australians (AIHW 2007). Hospitalisation rates increased with age (0.4 per 100 for 12 to 14 year olds; 1.6 per 100 for 15 to 19 year olds; 3 per 100 for 20 to 24 year olds). In 2003–04, depression was the second most common principal diagnosis among young Aboriginal and Torres Strait Islander people attending community mental health services, accounting for 15% of 49,000 contacts (National Community Mental Health Care Database, unpublished data).
- *Youth from a sexual minority and gender diverse group*[1] — According to information from the Australian Bureau of Statistics, people who report being homosexual/bisexual have higher levels of anxiety disorders (around 31% vs 14%), depression and related disorders (around 19% vs 6%) and substance use disorders (around 9% vs 5%) than people who report being heterosexual (Corboz et al 2008).
- *Youth who resettled in Australia on a refugee program* — Studies suggest that young refugee people experience an increased rate of mental illness, often including co-occurring depression, anxiety and post-traumatic stress disorder (Department of Health and Ageing 2004).
- *Homeless or institutionalised youth* — Homeless youth in Australia have been found to score significantly higher on standardised measures of psychological distress than all domiciled control groups (Kamieniecki 2001). Youth homelessness studies have also reported very high rates of suicidal behaviour, but methodological limitations in these studies make comparisons with community surveys difficult (Kamieniecki 2001). The mental health problems of young people in custody are also considerable (AIHW 2009).
- *Young people living with disability* — Children with a disability are more at risk of mental health and behavioural problems (including depressive disorders) than the general population (NICE 2005). An Australian longitudinal study found that children and adolescents with intellectual disability have approximately three to four times higher rates of mental health problems than typically developing children, and that these problems persist into young adulthood (Einfeld et al 2006).

Risk factors for depression among specific groups are discussed in Section B1.2.

A1.1.2 Mortality

The strongest risk factors for suicide are mental health disorders, particularly depression (Beautris 2000). In 2005, 14% of all suicide deaths were of young people, and suicide accounted for one-fifth of all deaths of young people (Eldridge 2008). Suicide rates increased with age for both males and females: from 1 death per 100,000 young people aged 12 to 14 years to 5 per 100,000 15 to 17 year olds and 13 per 100,000 18 to 24 year olds.

The Western Australian Aboriginal Child Study found that more than 16% of Aboriginal young people aged 12 to 17 years had seriously considered committing suicide in the 12 months prior to the survey — of these, 39% had attempted suicide (Zubrick et al 2005). The age-standardised suicide rate for 12 to 24 year olds was more than four times as high among Aboriginal and Torres Strait Islander young people compared with non-Indigenous young people: 37 compared with 8 deaths per 100,000 young people in 2003–05 (data includes Queensland, Western Australia, South Australia and the Northern Territory only) (Eldridge 2008).

A1.2 Snapshot of service use by young people in Australia

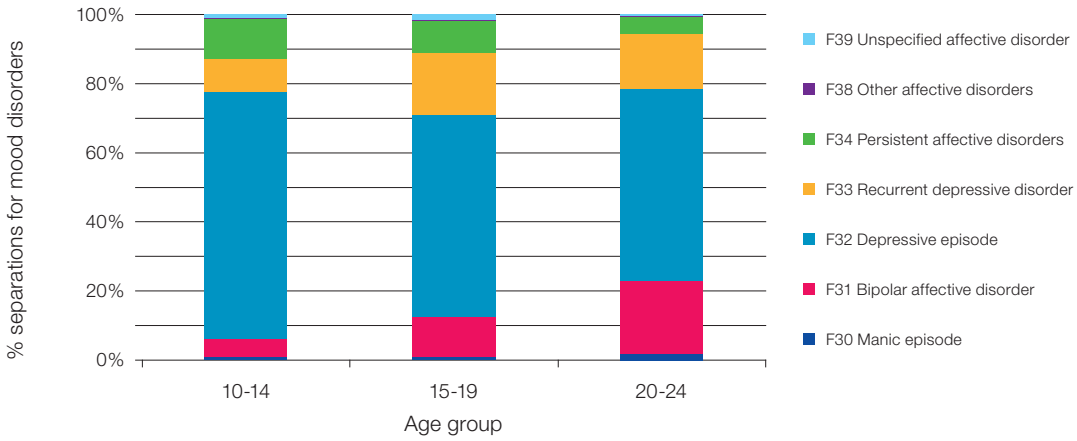
A wide range of health services attend to mental health needs, including general practice, community and specialist mental health services and services provided in residential and ambulatory care settings (AIHW 2005). Acute management of moderate to severe depressive disorders may be required (emergency department and/or inpatient), particularly in cases of self-harm and/or suicidal behaviour.

Survey findings indicate that many young people do not seek professional help for mental health problems and that service use levels in this age group are low overall (see Section A3.1).

1 *beyondblue* has consulted with relevant organisations and these Guidelines use the term individuals from a 'sexual minority and gender diverse' group, as this was found to be preferred usage.

- *General practice consultations* — In 2007–08, people aged less than 15 years accounted for 2.2% of general practice consultations for mental health problems, with depression/anxiety disorder being among the most common mental health problems managed (13%) (AIHW 2009). In 2006–07, those aged 15 to 24 years accounted for 7% of general practice consultations for mental health problems (AIHW 2008). For the general population, more than one-third of general practice consultations for mental health problems were for depression.
- *Hospitalisation* — In 2006–07 around a quarter of hospitalisations for mental and behavioural disorders in people aged 10 to 24 years were for mood (affective) disorders (AIHW Hospital Morbidity Database), with depressive disorders accounting for the greatest proportion of these separations (see Figure A1.1). Hospitalisation for self-harm was most common among females aged 15 to 19 years (Bradley & Harrison 2008).

Figure A1.1 Separations with a principal diagnosis of mood (affective) disorders among adolescents and young adults, Australia 2006–2007



Source: AIHW Hospital Morbidity Database.

- *Emergency department presentations* — It is estimated that there were 200,000 mental health-related emergency department attendances in public hospitals in 2005–06 (AIHW 2008), of which almost a quarter (22%) involved people aged between 15 and 24 years. Mood disorders accounted for 18.7% of the attendances (all age-groups).
- *Community mental health care* — In 2005–06, 7.5% of these services involved people aged less than 15 years and 17.3% involved people aged 15 to 24 years (AIHW 2008). Depressive episodes and bipolar disorder were among the most common principal diagnoses reported.
- *Medicare-subsidised psychiatrist service* — In 2006–07, 1.3% of the Australian population received Medicare-subsidised psychiatrist services. Of these, 3.7% of patients were aged under 15 years and 12.6% were aged between 15 and 24 years.

Key points

Available data suggest the following:

- mental health disorders are common among young Australians — the prevalence of depression increases with age, with a higher female to male ratio developing after puberty until early adulthood (this may in part reflect greater reporting of depressive symptoms by females);
- the prevalence of mental health problems and of suicide among Aboriginal and Torres Strait Islander youth is significantly higher than that of their non-Indigenous counterparts.
- depression is more prevalent among certain sociocultural groups (young people from a sexual minority and gender diverse group, youth who resettled in Australia under a refugee program and homeless or institutionalised youth); and
- depression is a leading cause of health service attendances for mental health problems among young people.

A2 Understanding depression in young people

Adolescence is a period of life characterised by rapid physical, cognitive and psychosocial changes. The primary developmental task of adolescence is to continue to develop and settle upon a coherent sense of self as well as achieve control of mood, impulsivity and behaviour in more complex environmental settings. This development does not stop at ages 18 or 21 when the young person reaches legal or societal definitions of adulthood, but usually extends into the twenties as the young person continues developing from a dependent child into an independent adult.

During adolescence, individuals encounter new situations, responsibilities and expectations and explore different ways of thinking and behaving as well as being exposed to a wide range of ideas and values. Adolescents confront the challenge of reconciling who they feel they are, with what they perceive is socially desirable. The search for identity, negotiating changing relationships with peers and family, the desire for autonomy while trying to fit in, and simultaneously trying to succeed in school and social settings, may result in moody and unpredictable behaviour that resolves as the young person matures.

The stresses associated with the transition of adolescence, together with poor interpersonal skills, negative thought processes and/or difficult past experiences, can lead to changes in mood, thinking and activity that impair personal and social functioning. Adolescence and young adulthood is the age of peak onset of mental health problems such as depression, anxiety and other mood disorders (Kessler et al 2005).

A2.1 Depression in the context of adolescence and young adulthood

Depression in young people should be seen in a multi-systems context, not just as relating to a developmental phase. It involves peers, family, school and the local environment, and depends on individuals' interpretation of themselves and their surroundings — all of which are embedded in their social and cultural context.

The causes of depression are complex, with a range of risk and protective factors thought to be involved, together with the context in which they are either expressed or mediated. These factors can be specific to the person, a product of the environment, or result from an interaction between the person and the environment. Section B1 provides a review of the current evidence base concerning risk and protective factors for depression in young people and discusses sociocultural factors recognised as contributing to the development of depression.

A2.2 Signs and symptoms of a depressive episode

Depression is characterised by a wide range of emotional, cognitive and physical signs and symptoms. Signs of depression are frequently accompanied by symptoms of anxiety, but may occur on their own.

Table A2.1 Common depressive signs and symptoms in young people

Emotional changes	Sadness or hopelessness Irritability, anger or hostility Tearfulness or frequent crying Loss of pleasure in activities (anhedonia) Feelings of worthlessness and guilt Lack of enthusiasm and motivation
Cognitive changes	Inefficient thinking, usually with a pronounced self-critical focus Loss of concentration, poor attention and an inability to make decisions Low self-esteem Negative body image Apathy Thoughts of death or suicide

Behavioural changes	Decreased participation in school Disinterest in general appearance Decreased participation with peers and normally enjoyed activities Self-harm or deteriorated self-care or promiscuity Avoidance of family interactions and activities More withdrawn behaviour including clearly more time spent alone
Physical changes	Fatigue, lack of energy, poor motivation Increase or decrease in appetite (resulting in weight gain or loss) Disrupted sleep rhythms (resulting in insomnia at night or hypersomnia during the day) Lowered libido Restlessness and agitation Unexplained aches and pains

Source: Adapted from NICE (2005).

A young person exhibiting several of these symptoms or behaviours may have an emerging or current depressive disorder, particularly if they occur at the same time. However, it is important to differentiate between normal emotions and depression as a disorder (i.e. not to 'medicalise' normal sadness). The most important distinction is that depression is associated with impaired functioning, demonstrated by a diminished competence in completing the tasks of daily living, maintaining relationships with friends and family, and ability in school and work environments. These changes are accompanied by persistent, conspicuous changes in mood or behaviour, together with a relative lack of responsiveness to experiences that might normally bring pleasure or relief.

A2.3 Spectrum of depressive disorders

Depressive disorders (also known as mood or affective disorders) exist on a continuum and are classified on the basis of severity and pervasiveness of symptoms and the presence or absence of mania (abnormally and persistently elevated mood). Symptoms range from subsyndromal (not meeting criteria for a depressive disorder) to syndromal (meeting the criteria for a depressive disorder) (AACAP 2007; Zalsman et al 2006). A brief characterisation of the different disorders is given in Table C2.2. The full diagnostic criteria for the major international classification systems for depressive disorders (DSM-IV-TR and ICD-10) are given in Appendix 4.

While symptom-orientated diagnostic criteria are useful in guiding diagnosis, treatment and understanding of the research literature, biological, psychological and social factors have a significant impact on response to treatment and are not captured by existing diagnostic criteria (NICE 2005). Understanding contextual factors is always important.

During the course of their depression, young people may move between diagnostic categories — for example, a relapse of dysthymia can manifest as anxiety disorder.

Many individuals may not meet diagnostic criteria for depressive disorders but still experience psychosocial impairment that may benefit from monitoring and possibly treatment (e.g. psychological therapy). Subsyndromal depressions have not been well studied, but are likely to be risk factors for or precursors to major depression (NICE 2005).

A2.4 Co-occurring conditions

Co-occurring conditions are common in depressed adolescents (AACAP 2007; Zalsman et al 2006). Depending on the setting and source of referral, 40–90% of young people with depressive disorders also have other psychiatric disorders, with up to 50% having two or more co-occurring diagnoses (AACAP 2007):

- anxiety is often a precursor of depressive disorder and is the most frequent co-occurring condition;
- disruptive behaviour disorders such as attention deficit hyperactivity disorder, oppositional defiant disorder and conduct disorder commonly co-occur with depression;
- depression increases the risk of other non-mood psychiatric problems such as eating disorders and substance misuse; and

- depression frequently predates non-mood psychiatric problems, or can be a consequence of the chronic nature and ongoing challenges inherent to these disorders.

Depression is also commonly found in young people with a history of mood elevation, suicidal thinking or attempt, self-harm not related to a suicide attempt and personality disorders. A community-based longitudinal study found that adolescents with personality disorders are at elevated risk for major mental disorders (including depression) and suicidal thinking or behaviour during early adulthood (Johnson et al 1999), and that childhood or adolescent major depression increases the odds of young adult personality disorder (Kasen et al 1999).

Co-occurring depression and substance use disorder is increasingly common. As emotional and behavioural problems rise, young people become more likely to smoke, drink alcohol, use marijuana and misuse medications (Sawyer et al 2000). Substance use disorders can both lead to and result from depression (Teesson & Proudfoot 2003).

Infections (e.g. glandular fever), endocrine disorders (e.g. diabetes), metabolic abnormalities, neoplasms or central nervous system disorders can be causes of organic depression in young people, which then co-occurs with the medical illness. Lowered mood and occasionally depressive disorders can also result from treatments for medical conditions, or from problems arising from difficulty adjusting to the illness or the diagnosis. Findings from the 2007 National Survey of Mental Health and Wellbeing of people aged 16 to 85 years suggest that young people with a chronic disease have higher rates of mental disorders than those without these disorders (Teesson et al 2009).

Key points

- For clinical purposes, depressive disorders are classified according to diagnostic criteria such as DSM-IV-TR or ICD-10. However, depressive disorders in young people are complex and heterogenous. Many factors besides symptoms must be considered.
- Many young people with depression do not 'fit' neatly into a single diagnostic category. For example, the symptoms of dysthymia are more chronic but less severe than those of major depressive disorder but the two disorders can also co-occur.
- Many young people with a depressive disorder have at least one other psychiatric disorder, most commonly an anxiety disorder.

A2.5 Differences in depression between young people and older adults

Overall, the symptoms, course and outcomes of depression are similar in adolescents and young adults to those in older adults. There are some specific differences, however, that have implications for assessing and treating depression in young people:

- developmental phases (cognitive, social and emotional) are more relevant in young people;
- in adolescents, mood may be described as irritable or cranky rather than sad;
- considering the wider context, particularly the family and educational (school, traineeship, university) environment, is vital in assessment and treatment of young people;
- current knowledge suggests that the biological causes of depression increase as people age;
- psychosocial adversity may be relatively more prominent in younger people with depression;
- associated anxiety symptoms (e.g. fear of separation or reluctance to meet people) and physical symptoms (e.g. aches and pains) are more common in depressed youth than in older adults;
- while symptoms of depression tend to be similar in young people and older adults, depressed young people are more likely to present initially with other problems (e.g. substance misuse, violent or destructive behaviour, eating disorders and absences from school);
- while young people have higher overall rates of substance misuse, older adults are more likely to have substance dependence and therefore more prone to substance-induced mood disorder; and
- the types of treatments that are effective and acceptable differ, particularly in the area of medications.

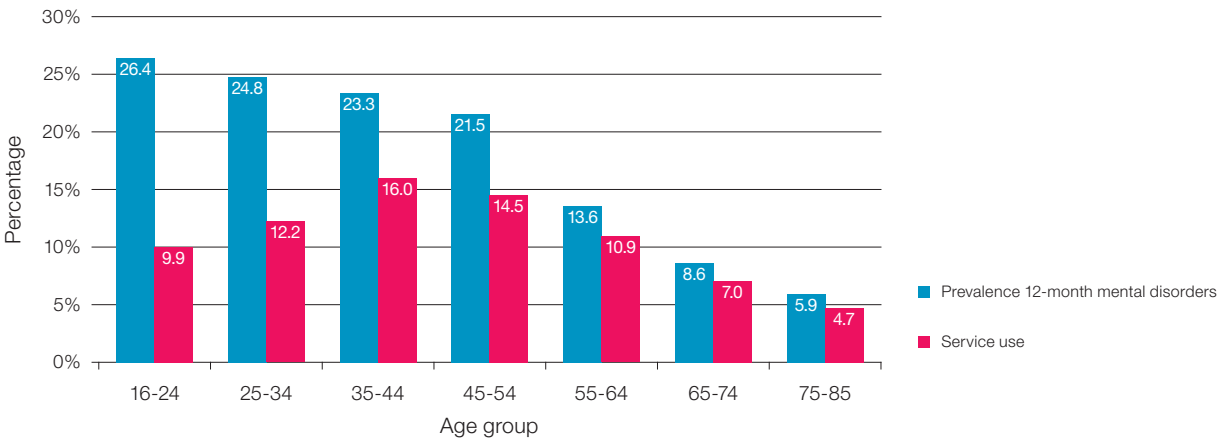
A3 Barriers and facilitators to help-seeking and service provision

A3.1 Help-seeking by young people

Despite the high prevalence of depressive symptoms among young people, and increased awareness of mental health generally, many young people remain reluctant to seek professional help for mental health problems.

While results from the Mental Health of Australians and the Mental Health of Young People surveys are broader than depression alone, the findings on help-seeking are likely to be relevant. The Mental Health of Young People Survey found that only 29% of adolescents with mental health symptoms had been in contact with a professional service of any type over a 12-month period (Sawyer et al 2000). The Mental Health of Australians Survey found low service use among 16 to 24 year olds with a 12-month history of a mental health disorder, especially compared with older adults (see Figure A3.1).

Figure A3.1 Variation of service use compared with prevalence of mental health disorder, by age



Source: Sawyer, survey data compiled for *beyondblue*.

Help-seeking behaviour is not just about being aware of depressive symptoms and talking to someone about them. Many factors are involved, including the person's mental health literacy, attitudes and their perception of stigma, as well as support systems, referral pathways, the types of services available and payment systems (Rickwood et al 2007).

A3.1.1 Barriers to help-seeking

The most frequently reported reasons for delayed help-seeking by young people are lack of recognition that they have a mental health problem and lack of knowledge about how and where to seek help (Wright & Jorm 2009).

Australian studies exploring the mental health literacy of young people have found a mixed level of knowledge related to adolescents' ability to 'label' depression and identify the key symptoms, with girls demonstrating greater knowledge and ability than boys (Wright et al 2005; Burns & Rapee 2006). Young males are at particular risk of inaccurate labelling that may hinder help-seeking (Wright & Jorm 2009).

The knowledge of friends and family is also important. Peers are often an important source of support to young people, especially during emotionally difficult times. However, many adolescents do not respond to friends' distress in ways that are likely to facilitate appropriate assistance (e.g. asking a parent, teacher or school counsellor to help) (Kelly et al 2006).

Some parents are unaware that adolescents can experience depressive disorders, and therefore do not actively consider this possibility. In addition, the attitudes of young people and their parents to treatments for depression may not reflect evidence-based practice and this may hinder treatment; in an Australian study, antidepressants were viewed less favourably than vitamins and CBT was rated as less helpful than counselling by adolescents, young adults and their parents (Jorm & Wright 2007).

Even when young people have the knowledge to recognise mental health problems, they may experience other barriers to help-seeking (Rickwood et al 2007), such as:

- a belief that they should be able to handle problems themselves, without outside help;

- fear that seeking professional help will increase their risk of being stigmatised by friends and peers;
- negative experiences with help-seeking in the past;
- social withdrawal and a desire to hide their distress, which are common depressive symptoms; and
- suicidal thinking, which also works against intentions to seek help — as suicidal thinking increases, young people become more likely to indicate that they would not seek help from anyone.

Groups with low levels of help-seeking

Young men, and young people who are Aboriginal, Torres Strait Islander or from other culturally and linguistically diverse backgrounds, are the least likely to seek professional help for depression (Rickwood et al 2007).

In a Queensland study of young adults aged 15 to 24 years, 39% of the males and 22% of the females reported that they would *not* seek help from formal services for personal, emotional or distressing problems (Donald et al 2000) and 30% of males reported they would not seek help from anyone. The gender difference in help-seeking varies according to type of problem and source of help; however, young men show greater unwillingness (Rickwood et al 2005), which is of particular concern in the light of high rates of completed suicide in men (ABS 2006).

Despite the high proportion of Aboriginal children at high risk of clinically significant emotional and behavioural difficulties, only 11% of Aboriginal children aged 12 to 17 years surveyed in Western Australia had contact with mental health services (Zubrick et al 2005). Children were more likely to have been seen by mental health services if they were at high risk of clinically significant emotional or behavioural difficulties, lived in a family with poor family functioning, or if their primary carer had been seen by mental health services (Zubrick et al 2005). While young Aboriginal people with multiple risk factors for depression are an important target population, they tend not to access help from community agencies or at school, and may also not seek help within their cultural community, due to concerns about confidentiality and being labelled (Adermann & Campbell 2007).

From the few studies specifically of help-seeking for young people from other culturally and linguistically diverse backgrounds, there appears to be a reluctance to voluntarily seek help from mental health services (Minas et al 1996; McDonald & Steel 1997). Reasons for this include language and cultural barriers, lack of information on services and stigma. If parents are unaware of youth services or view them with suspicion, it is even more unlikely that their children will access the services (Department of Health and Ageing 2004).

Young people from a sexual minority and gender diverse group who have depressive symptoms may be less likely to seek help than other young people, particularly if they are victims of abuse or their school and/or home environment is discriminatory; a culture of this kind makes it more difficult for young people to tell others about their experiences and seek support (Corboz et al 2008). These young people may also be reluctant to disclose their sexual orientation to health professionals due to fear of discrimination or a belief that it is not relevant (D'Augelli et al 1998; Meckler et al 2006). Satisfaction with mental health services is lower among individuals from a sexual minority and gender diverse group than among their heterosexual peers (Welsh et al 2000; Avery et al 2001; McNair et al 2009).

A3.1.2 Facilitators of help-seeking

Young people who have been exposed to mental health community awareness campaigns or whose parents use the correct terms to describe mental health disorders are more likely to have the knowledge and awareness to recognise when they may need to seek help (Wright & Jorm 2009).

Other facilitators of help-seeking by young people include acceptance that they may have depressive symptoms, sufficient emotional competence, and trusted relationships with people who can help and support them (Rickwood et al 2007).

Where do young people seek help?

Initially, young people tend to try to find help from friends and family (Sheffield et al 2004) and usually need their support to seek appropriate professional help, generally from their school counsellor or a GP. These professionals are important sources of referral to mental health services for young people (Rickwood et al 2007). Young people are also increasingly using Internet-based sources of information and support about mental health problems. Online automated self-help programs (e.g. MoodGYM, e-couch) may increase awareness and serve as a starting point for seeking evidence-based treatments (Andersson & Cuijpers 2008).

Key points

- Young people are the least likely to seek help for mental health problems, even though as a group they have a significant need for mental health interventions.
- Lack of knowledge about symptoms of depression and where to get help are frequently reported reasons for delayed help-seeking.
- Some groups — young males, young people from Aboriginal and Torres Strait Islander or other culturally and linguistically diverse backgrounds, young people from a sexual minority and gender diverse group — may be less likely to seek professional help for depression.

A3.2 Service provision

Even when young people seek help for depressive symptoms, they may not receive the care they need. In particular, variation in the nature, course and outcomes of depression in all age groups can lead to under-recognition of depressive symptoms, especially by health professionals in schools and community and primary care settings.

A3.2.1 Barriers to service provision

Potential barriers to the provision of treatment for a young person include the following:

- limited availability of services that are youth friendly, culturally responsive and accessible (particularly in rural and remote areas);
- lack of research evidence to guide the best therapeutic approach;
- lack of therapists trained in evidence-based therapy such as cognitive behavioural therapy (CBT), interpersonal psychotherapy (IPT) and family-based therapy;
- lack of supervision of those conducting such therapy, to ensure adherence to models of therapy and the quality of the treatment delivered;
- lack of appropriately trained therapists who are experienced in working with this age group;
- lack of expertise in caring for this age group, which can result in both over/under prescribing and/or over/under-servicing;
- lack of adherence to confidentiality processes leading to dissatisfaction with care (Ford et al 1997); and
- a perception held by some health professionals that young adulthood does not represent a distinct developmental stage and that adult approaches are applicable.

A3.2.2 Facilitators of service provision

There are many factors that can encourage intervention for a young person who is depressed. Some of these include:

- readable, well-regarded and accessible guidelines;
- high levels of mental health literacy in the community, but particularly in school settings, among teachers and counsellors, and among general health workers;
- adequate training and supervision of health professionals in delivering evidence-based treatments;
- 24-hour hotline for access to specialised advice supporting other care;
- welcoming, youth-focused treatment services; and
- a comprehensive approach involving family, school and treatment providers.

The specialised nature of treatment in this area may lead health professionals not to intervene at all, out of fear that they may do harm because they are not sufficiently skilled. While it is important to weigh up the benefits and risks of any intervention, it is also important to provide a good standard of care (e.g. developing a therapeutic relationship, communicating effectively) while referral pathways are being arranged.

PART B Risk factors and prevention of depression in young people

This part of the Guidelines describes factors in the development and prevention of depression in young people. Section B1 provides:

- current evidence from the systematic literature review (SLR) undertaken for the Guidelines on the development of depression, including the wide range of factors associated with development of depression and protective factors that mitigate against it; and
- discussion of sociocultural factors that are recognised as contributing to the development of depression.

Section B2 outlines various approaches to the prevention of depression in adolescents and young adults and discusses current evidence from the SLR concerning the use of these approaches.

B1 Factors in the development of depression in young people

An approach across developmental periods such as adolescence and young adulthood must recognise biological, emotional and behavioural factors, as well as age-appropriate differences in peer and family interactions and adaptation to acute or chronic stressful events. Important concepts include:

- the interplay between environmental, contextual and familial factors (Bronfenbrenner & Ceci 1994);
- the fact that no particular outcome is related to a single pathway (Cicchetti & Toth 1995); and
- generally, that causation is complex rather than a direct event–outcome relationship (Rutter 1989).

As a result of this complexity, there are many factors involved in the development of depression. Some factors confer protection while others increase risk and there is also interplay between these variables.

B1.1 Risk and protective factors

B1.1.1 Summary of the evidence

Quality of the evidence

A total of 119 risk factor studies met the inclusion criteria for the SLR. These included prospective cohort studies, but not cross-sectional association studies. The implication from the literature is that the factors cited below are not merely associated with depression or depressive symptoms; rather, they predate such symptoms and may be causally related to them.

A limitation in the risk literature is the difficulty in determining which risk factors play the greatest role in development of depression, as it is not feasible to compare and contrast large numbers of risk factors within a single study. Few risk factors are replicated across several studies. Often a risk factor is reported in one study that focuses mainly on this variable.

There are also risk factors widely held by experts in the field to contribute to the development of depression that have not been investigated in studies that meet the SLR criteria (see Section B1.1.2).

Finally, not including cross-sectional studies of young adults precludes commenting on some variables that become prevalent during this developmental stage (e.g. leaving home, employment-related stressors, marriage and parenthood).

Key findings

This section discusses those factors where a significant risk or protective effect has been reported. The evidence statements and grades of evidence from the SLR are given in Table A3.5 in Appendix 3.

Inherent risk and protective factors

- **Gender** — Overall, the results of published relevant studies (e.g. Patton et al 2001; Gourion et al 2008) indicate that females have a substantially increased risk for depression, symptoms of depression, suicidal thinking and suicide attempts during adolescence and young adulthood, compared to males.
- **Ethnicity** — There is some evidence to suggest that young people from a black, Hispanic or other ethnic minority in the United States (US) might be at an increased risk of having depressive symptoms compared with white youth (Gore & Aseltine 2003; Warren 2008). It is not known to what extent these results can be generalised to culturally and linguistically diverse groups within Australia (see Section B1.2). It should be noted that ethnicity is a complex factor and risk may be associated with systemic and social determinants rather than any factor inherent to the child.
- **Genetics** — There is strong evidence for both genetic and environmental contributions to symptoms of depression (Rice et al 2002; Eley et al 2004). Current research does not support genetic variants (one form of a gene versus another) as significant predictors for depression or depressive symptoms. However, there is increasing evidence that the interaction between genes and environmental risk factors influences the development of depression or depressive symptoms in adolescence and young adulthood (Eley et al 2004; Sjöberg et al 2006). These environmental factors seem to be different in males and females. There is little research on risk and protective factors for youth onset bipolar disorder, although research with adults suggests a strong genetic contribution (Goldberg et al 2009).

Risk and protective factors with family origins

- **Family factors** that have been reported to increase the risk of depressive symptoms and depression in young people include mental health disorders in parents (Brennan et al 2002; Gourion et al 2008), parental divorce (Pelkonen et al 2008), negative parenting style (Patton et al 2001) and poor family functioning (Gore & Aseltine 2003; Pelkonen et al 2003). There is inconsistent evidence that low socioeconomic background and having a delinquent family member or affiliate with a delinquent peer may also increase risk. Living with fewer than two biological parents may increase risk of (short-term) depressive symptoms and depression in youth (Wichstrom 2000; Warren 2008).
- **Protective factors** reported include parental support (together with good peer support) (Young et al 2005), good family functioning (Eberhart & Hammen 2006) and high socioeconomic background (Gore & Aseltine 2003).
- There is contradictory evidence that **family characteristics** — being born later than other siblings, being part of a large family, and having an older mother — are related to higher rates of depression and suicidal thinking in youth. In males, having a parent remarry is a predictive factor of major depressive disorder (Reinherz et al 1993).

Risk and protective factors in infancy and childhood

- **Factors occurring in infancy** that are reported to be predictive of depressive symptoms and depression in youth include neonatal health problems (particularly in males) (Reinherz 1993; 1999) and low birth weight in females (Costello et al 2007). Neonatal incubator care (if indicated) is a protective factor for major depressive disorder in young female adults (Gourion et al 2008).
- **Childhood** factors reported to predict depressive symptoms, depression or suicide attempts in youth include disruptive behaviour (Reinherz et al 1993; Costello et al 2007), poor emotional control (Patton et al 2008), and sexual (Reinherz et al 1999; Brezo et al 2008) and physical (Salzinger et al 2007; Fergusson et al 2008) abuse. Perceived strong child-parent attachment and dependency (including the child's neediness for parental guidance and the child's perceived attachment to the parents) may increase risk in male youths, although the evidence is contradictory (Reinherz et al 1993; Frost et al 1999).

Risk and protective factors in adolescence

- **Psychological factors** experienced to some degree by most adolescents and reported as increasing the risk of depressive symptoms, depression or suicide attempt include low self-esteem (Lewinsohn et al 1994a; Hadjiyannakis 2003), poor perception of their role within the family (particularly in males) (Reinherz et al 1993; 1999), negative attribution (Spasojevic & Alloy 2001), high-risk cognitive style (e.g. perfectionist, pessimist) (Alloy et al 2006), poor body image (Stice & Bearman 2001; Paxton et al 2006; Bearman & Stice 2008), and eating disorders and symptoms of eating disorders (in females) (Stice & Bearman 2001; Hadjiyannakis 2003; Stice et al 2004). Conversely, high self-esteem, positive attributional style and having a high number of ego resilient traits (Bromley et al 2006) may be protective.
- **Less common psychological factors** experienced in adolescence and reported as predicting depressive symptoms and depression later in life include past or current depressive symptoms (Gore & Aseltine 2003; Hadjiyannakis 2003; Franko et al 2004; Mason et al 2008) or other mental health disorder (Lewinsohn et al 1994a), suicidal thinking or attempts (Lewinsohn et al 1994a; 1994b), internalising problems (co-occurring mood and anxiety symptoms) (Frost et al 1999; Sourander et al 2001), anxiety (Costello et al 2007), and high levels of neuroticism or psychoticism (Yang et al 2008). Hypomanic behaviour can predict hypomania in youth, while mania increases the risk of major depression (Blechert & Meyer 2005; Biederman et al 2007).
- **Lifestyle factors** — The evidence on the relationship between physical activity in adolescence and risk of depressive symptoms, bipolar disorder and dysthymia in youth (Choi et al 1997; Eamon 2002; Ball et al 2009) is contradictory. Extreme dieting may predict depressive symptoms, suicidal thinking and suicide attempt in female youth (Stice & Bearman 2001; Crow et al 2008).
- **Social factors** — Low quality relationships are a predictor for and high quality relationships are protective against the development of depressive symptoms, depression, suicidal thinking and suicide attempt in youth (Bridge et al 2003; Gore & Aseltine 2003; Hadjiyannakis 2003). There is contradictory evidence for romantic involvement as a predictor of the development of depressive symptoms and suicide attempts (Wichstrom & Rossow 2002; Pelkonen et al 2008; Stroud & Davila 2008).
- **Biological factors** — Adolescents who experience physical health problems (medical illness or physical disability) or perceive their health as poor are more likely to develop depressive symptoms, depression and suicidal thinking (Reinherz et al 1993; Cohen et al 1998; Reinherz et al 1999; Warren 2008). Sleeping problems are a predictor for depressive symptoms or depression in adolescence (Hadjiyannakis 2003; Roane & Taylor 2008).
- **Negative life events** — Factors such as family conflict, loss of a friend or relative and traumatic experiences are predictive of depressive symptoms, depression and suicidal thinking (Franko et al 2004; Brown et al 2007; Costello et al 2007). In particular, exposure to a completed suicide or suicide attempt of a friend or family member substantially increases risk of depression and suicide attempts (Lewinsohn et al 1994b; Bridge et al 2003) and, for females, the loss of a parent may increase the risk of depressive symptoms or depression (Frost et al 1999; Reinherz et al 1999). School performance may be protective when good and increase the risk of depressive symptoms and depression when poor (Gore & Aseltine 2003; Hadjiyannakis 2003; McCarty et al 2008).
- **Risky behaviour** — Adolescent behaviours that may predict depressive symptoms and depression in later life include substance misuse (Rao et al 2000; Stice et al 2004; O'Donnell et al 2005; Clark et al 2007), smoking (Choi et al 1997; Windle & Windle 2001; Galambos et al 2004; Duncan & Rees 2005), and cannabis use (particularly in those of younger age or in females) (Windle & Windle 2001; Fergusson et al 2002; Wilcox & Anthony 2004; Van Voorhees et al 2008a). The evidence on use of other drugs is too limited and inconsistent to make conclusions. Teenage pregnancy may be a predictive factor for depressive symptoms and depression in female youth; among those who become pregnant, the pregnancy being unintended is not in itself a significant predictor of depression (Reinherz et al 1993; Warren 2008).

Evidence specific to interacting risk factors and mediator factors can be found in the full report of the SLR.

Key points

- A wide range of risk and protective factors has been found for depression, including factors inherent to the young person (e.g. gender, genetic variation), family-related factors and factors with systemic or societal origins.
- Large longitudinal studies, incorporating a broad range of risk factors and ideally including new potential biological markers, are needed to clarify which risk factors play the greatest role in development of depression and the way in which risk factors interact.

B1.1.2 Taking an individual's risk and protective factors into consideration

Comments about risk factors relate to the population and as a result are generalisations. There are a number of issues that should be considered when assessing risk in an individual.

- Factors such as experiencing bullying or violence, difficulties with adjusting to sexual development or same-gender sexual orientation are widely recognised as contributing to the development of depression. However, these factors have been less studied in the adolescent and young adult age groups, especially if the standard of research is set at the rigorous level of longitudinal rather than cross-sectional studies.
- Risk factors are often on causal pathways. Young people may have one or more risk factors for depression as a direct result of other factors. For example, 'poor school performance' is an established risk factor, however, there are likely to be biological, psychological or family factors that in turn predict poor school performance.
- Interactions between risk factors are not static; for example, it is likely that young people's relationships with their parents are constantly developed and refined across the adolescent and young adult phases. In many cases, different risk factors are closely associated (e.g. a teenager with poor social skills may also experience peer rejection and social isolation).
- At an individual level, having risk factors does not necessarily result in depression. The effects of adversity on the individual also depend on his or her attributional style, coping skills, levels of support and genetic factors (Burns et al 2002; AACAP 2007). As a result, many children with risk factors do not develop depression or even depressive symptoms. This resilience (positive outcome in the context of adversity) has been defined as a good developmental outcome despite high risk, sustained competence under stress, or recovery from trauma (Werner 1997). The pathways to resilience are complex and not fully understood. While protective factors appear to be beneficial at all levels of risk, there may be limits to the effects of some protective factors at the highest level of risk (e.g. in young people facing multiple adversities).
- It is clear from longitudinal studies that risk factors for depression often co-occur, and that the probability of a negative outcome rises as the number of risk factors increases (Vanderbilt-Adriance & Shaw 2008). For example, different types of adversity such as poverty and low parent educational level often occur together in families and can have long-standing effects on young people's development and mental health.
- Young people with other conditions (e.g. intellectual or physical disability) have a known set of risk factors for depression; while the precise cause is unclear, these young people are likely to experience a complex pattern of interacting risk factors. For example, young people with an intellectual disability may experience difficulties in dealing with grief and loss, problem solving and coping with change, which is compounded by problems with living, such as housing and work insecurity (McGillivray & McCabe 2009).

The following table summarises factors that may increase the risk of depressive symptoms or depression. Sociocultural factors are discussed in Section B1.2.

Table B1.1 Summary of major risk factors

	Biological	Individual	Family	Peers and society
Inherent	Female sex Genetics			Ethnic minority
Past	Low birth weight (females) Neonatal health problems (particularly in males) No incubated care (if indicated) (females)	Parent-child attachment issue Temperament Poor emotional regulation Disruptive behaviour	Maternal or paternal depression Emotional neglect Parenting style Family member delinquency	Peer delinquency Bullying or violence
Current	Pubertal development Sleeping difficulties Health concerns Substance misuse	Self-esteem Body image Attributional style Cognitive style Poor school performance Adjustment to sexual development	Suicide of family member	Suicide of peer Relationship quality Teenage pregnancy Bullying or violence Same-gender sexual orientation

Note: Evidence from the SLR is shaded in blue; factors that are also recognised as contributing to the development of depression are shaded in green.

Key points

- Risk factors are often on causal pathways — the factors cited above may not be the first on this path.
- Risk factors for depression often co-occur, and the probability of a negative outcome increases as the number of risk factors increases. However, many children and adolescents with risk factors do not develop depression or even depressive symptoms.
- Protective factors appear to be beneficial at all levels of risk but there may be limits to the effects of some protective factors at the highest level of risk (e.g. in young people facing multiple adversities).

B1.2 Sociocultural background and risk of depression

While the majority of research identified in the SLR was from general population cohorts, there have been recent advances in quality data on 'at-risk' groups (e.g. Zubrick et al 2005, Corboz et al 2008). This section highlights sociocultural groups that currently experience a higher risk of depression.

Aboriginal and Torres Strait Islander youth

Any consideration of mental health in Aboriginal and Torres Strait Islander communities needs to be placed within a social and historical context that takes into account the traditional holistic understanding of health, incorporating the physical, social, emotional and cultural wellbeing of the whole community. However, it is clear that many Aboriginal and Torres Strait Islander young people are exposed to multiple risk factors for depression, including:

- parental depression (in turn influenced by transgenerational effects of separation and dispossession of culture and land);
- separation from parents;

- severe stress from chronic, multiple and traumatic losses, abuse and family violence, racial discrimination and criminalisation and detention in custody;
- physical health problems with or without associated learning difficulties and interruption to education;
- alcohol and other substance misuse; and
- poverty and unemployment.

The West Australian Aboriginal Child Health Survey found that 70% of Aboriginal children were living in families that had experienced three or more major life stress events (such as a death in the family, serious illness, family breakdown, financial problems or arrest) and 22% had experienced seven or more such events in the 12 months prior to the survey (Zubrick et al 2005). In addition, the higher proportion of children at high risk of difficulties, and the lower adult-to-child ratio in the Aboriginal population result in proportionally fewer adult carers to assist children who experience difficulties (Zubrick et al 2005).

Protective factors that mediate against the development of depression in Aboriginal and Torres Strait Islander young people are similar to other young people, and include positive, adaptable temperaments, well-developed problem-solving and coping skills, and a strong desire to succeed, together with attachment to at least one caregiver and positive contact with peers. Also protective in Aboriginal and Torres Strait Islander young people appear to be pride in culture, hope for the future and sporting skills (Adermann & Campbell 2007).

Youth from a sexual minority and gender diverse group

Despite increasing acceptance in society and greater visibility in the media and public life of individuals from sexual minority and gender diverse groups, prejudice and misunderstanding can still be a common experience. Many individuals from sexual minority and gender diverse groups still experience social isolation, discrimination, harassment and violence in a range of settings including work, school and social situations, and have to manage the effects of this on a daily basis throughout their lives. A review of mental health in people from sexual minority and gender diverse groups (*beyondblue* 2009) found that discrimination can take the form of:

- obvious acts of prejudice and discrimination (e.g. someone who is open about being transgender being refused employment or promotion); and
- subtler but no less harmful discrimination that reinforces negative stereotypes and feelings of difference (e.g. use of the word ‘gay’ as a derogatory term).

Experiences with systemic discrimination and stigmatisation can lead to greater vulnerability to emotional distress, depression and anxiety (*beyondblue* 2009).

Around 10% of young Australians experience same-sex attraction, most realising this around puberty (Hillier et al 2005). In schools, students who are known to be same-sex attracted may be more likely to experience bullying and have greater difficulty in connecting with others. In an Australian study, 44% of young non-heterosexual people reported experiencing verbal abuse and 16% reported physical abuse (Hillier et al 2005).

Young people with a history of verbal, sexual and/or physical victimisation and abuse have higher levels of mental health problems than non-heterosexual young people — including sexual risk-taking, risky use of alcohol and drugs, dropping out of school, homelessness, self-harm and attempted suicide (D’Augelli & Hershberger 1993; Lock & Steiner 1999; Fergusson et al 2005).

Young people who have experienced trauma

Young people who have settled in Australia under a refugee program (particularly those who have been exposed to torture and trauma) are at very high risk of depression and other mental health disorders, because they have been exposed to traumatic experiences, such as loss and ongoing conflict, at a time when they are also going through the normal developmental tasks of adolescence (Luntz 1998). These youth are exposed to a range of factors affecting mental health and wellbeing including the impact of trauma on the family, intergenerational issues, negotiating more than one culture, dealing with a past history of exposure to violence, displacement and hardship and dealing with the challenges of settlement.

Natural disasters are another form of trauma. From a national and international perspective, natural disasters are frequent events, often affecting the lives of large numbers of individuals and families. Depressive symptoms have been correlated with disaster exposure and emotional trauma symptoms (McDermott & Palmer 2002).

Homeless youth

Homeless youth includes those who regularly spend nights in shelters or on the street without adult supervision, as well as those who are episodically homeless and those who move from house to house.

Most youth who are homeless state that family conflict is the primary reason for their homelessness, and report neglect, and verbal, physical and sexual abuse as common experiences. Often as a result of continuing conflict and trauma, they are also less likely to have protective factors such as positive coping skills and psychological resilience. Aspects of homelessness such as poor social integration, victimisation and alcohol and drug use increase vulnerability to depression. Attempting to meet basic needs while dealing with past and present trauma can compound mental health problems and depressive symptoms can worsen (Robertson & Toro 1999).

Young people in the criminal justice system

Young people who are in custody have high levels of risk-taking behaviours, especially where there is a background involving disadvantage, instability, social exclusion, parental imprisonment, living away from the family home, being taken into care as a child, and living with a person with a physical or mental disability (AIHW 2009). Repeated offenders convicted of serious and violent crime tend to have high levels of long-standing depressive disorder, including repeated undisclosed suicide attempts.

Key point

- Young people from particular social and cultural backgrounds may be more likely to experience depression, including Aboriginal and Torres Strait Islander youth, young people from a sexual minority and gender diverse group, young people who have settled in Australia under a refugee program, and homeless or institutionalised youth.

B1.3 Identifying youth at risk in schools and community settings

Schools

Approaches to student mental health issues in Australian secondary schools emphasise promotion and prevention as well as early intervention strategies. This is reflected in current approaches that encourage all members of the school community to contribute to an environment that promotes positive mental health and reduces common risk factors for depressive symptoms, such as bullying.

School leadership, working with staff with mental health expertise, can support a whole-of-school approach by:

- developing clear policies, processes and protocols for school staff with respect to their roles in supporting student mental health, including individual students who may be having problems — this includes opportunities for staff to receive basic training in understanding and responding to common student mental health issues;
- identifying and promoting information on youth mental health to the broader school community, particularly information on local service providers, credible online resources such as those provided by *beyondblue*, headspace and the Black Dog Institute and evidence-based mental health programs;
- developing strong links with local service providers to improve pathways for students and families seeking external support; and
- developing strategies for keeping students experiencing mental health problems engaged in their schooling and other activities.

Schools can play an important role in developing student resilience by promoting a school culture that emphasises supportive relationships and builds a student's sense of belonging, and by providing opportunities for students to develop social and emotional competencies.

A range of professionals either inside or outside the school undertakes assessment and management of individual students experiencing depressive symptoms. These include (among others) psychologists, guidance officers, counsellors and youth workers. Specific roles often vary, even within individual professions. Ideally, professionals working with individual students experiencing difficulties (and their families) should have guidelines to support their work that correspond to their education and training.

The following table outlines actions for teachers to assist in identifying students who may benefit from intervention. As early intervention offers the best prognosis, it is preferable to err on the side of caution and talk to the school psychologist about students with depressive symptoms. Where there is no school psychologist, teachers should refer to the person responsible for mental health and wellbeing in the school. Some cases can be managed by school staff (school psychologists, guidance officers, counsellors, social workers); others will need referral to a service that can provide psychological support (Child and Adolescent Mental Health Service [CAMHS], or a psychologist through referral from a general practitioner [GP]).

Table B1.2 A teacher's guide to identifying and supporting students experiencing depressive symptoms

What do teachers need to look for in students?
• **Physical signs**: Headaches, changes in eating, sleeping and energy levels, tiredness
• **Behavioural signs**: Changes in behaviour, self-harm, self-neglect, lack of motivation, poor school attendance, poor concentration
• **Cognitive signs**: Significant memory gaps, loss of motivation, lower marks, inability to make decisions
• **Emotional signs**: Depression, withdrawal, agitation, fear, guilt, aggression, anxiety, suicidal thinking, personality changes, reduced self-esteem, feelings of worthlessness
When should teachers consult a person with experience in mental health or consider referral?
• The problem does not seem to be getting any better
• They are uncertain about what the real problem is
• The skills needed are beyond their training/expertise
• They want another opinion
• They don't know what to do

Tertiary education

There are fewer opportunities for intervention in tertiary education facilities than in schools but easily accessible counselling services should be available.

Workplaces

Counselling services should also be available in workplaces. Young workers, new employees and apprentices may be particularly vulnerable to bullying (such as 'initiation' or 'hazing'). Systems need to be in place to prevent bullying, encourage reporting and respond when bullying occurs. 'Buddy' systems for new and young workers can assist with orientation and integration into the workplace.

Community settings

A range of people in the community may also be well placed to identify young people having mental health problems. These include (among others) facilitators of youth groups, staff at youth centres, people involved with young adults through sporting or other clubs, and religious or spiritual advisers.

Young people experiencing mental health problems often seek help from those in their support network, particularly family members and teachers (Sawyer et al 2000). It is important that people involved with young people in the community:

- have an understanding of the major risk and protective factors for youth mental health;
- can recognise the common signs and symptoms exhibited by youth experiencing difficulties; and
- have general knowledge of local pathways to care and support for young people.

Key points

Schools, tertiary institutions, youth services, workplaces and the community all have important roles to play in creating environments that promote emotional wellbeing and facilitating pathways to care and support for young people experiencing distress, depressive symptoms or depression.

B2 Prevention of depression in adolescents and young adults

B2.1 Overview — prevention of depression

Prevention programs for depression aim to intervene before depressive symptoms emerge or are still minimal. Programs for depression are generally based on knowledge about risk factors for depression in young people. Most programs use aspects of psychological therapy (e.g. cognitive behavioural interventions) to teach skills such as problem solving, changing tendencies to negative thoughts and actions, and/or improving communication (Stice et al 2009).

Primary prevention of depression is categorised depending on the target group. In some cases there is an overlap, with programs having elements of different types of prevention.

Table B2.1 Categories of primary prevention

Universal prevention	Interventions directed at entire populations regardless of exposure to risk factors or the presence or absence of signs or symptoms of mental health disorder	*Example* School-based training for all students in coping and problem-solving skills
Selective prevention	Programs specifically targeted at individuals or groups believed to be at higher risk of developing a mental health disorder (e.g. adolescents who have experienced bereavement or parental divorce)	*Example* Family interventions targeting adolescents with a depressed parent, aiming to improve cognitive restructuring techniques and increase family communication skills
Indicated prevention	Interventions targeted towards high-risk individuals based on minimal but detectable symptoms that could later develop into a depressive disorder	*Example* University-based interpersonal psychotherapy program targeting undergraduates with depressive symptoms, emphasising role transitions and ways to solve interpersonal disputes

Quality of the evidence

Many trials of prevention programs have been undertaken. While a universal approach to prevention has the potential for widespread impact, it is difficult to evaluate these interventions and to determine which risk factors to target, given the diversity of risk factors that may influence the general population (Sutton 2007). Selective and indicated interventions are also difficult to compare, due to the wide range of risk factors and/or symptoms considered, the different types of interventions used and the range of populations involved.

The strongest research has involved cognitive behavioural interventions in adolescents, with the quality and amount of research into other approaches being relatively minimal. The evidence base on prevention in young adults is very limited.

The SLR for these Guidelines examined randomised controlled trials, pseudo-randomised controlled trials and systematic reviews to determine the benefits, harms/adverse effects and cost-effectiveness of prevention strategies for depression in adolescents and young adults. In most studies, an intervention group was compared with one or more of the following control groups: wait-list, usual curriculum, placebo (no intervention or specific component) or psychoeducation (see Glossary). The evidence statement and grades of evidence from the SLR are given in Table A3.5 in Appendix 3.

B2.2 Prevention of depression among adolescents

B2.2.1 Universal prevention among adolescents

The vast majority of universal prevention strategies for adolescents are delivered in school-based settings. They include a range of psychosocial interventions:

- programs seeking to enhance students' cognitive behavioural skills (e.g. cognitive restructuring, coping, relaxation skills, increasing pleasant activities) and/or interpersonal skills (e.g. social problem solving, dealing with conflict) (Clarke et al 1993; Shatte 1997; Shochet et al 2001; Spence et al 2003; Merry et al 2004a; Shochet & Ham 2004; Stoppelbein 2004; Spence et al 2005; Chaplin et al 2006; Sheffield et al 2006; Gillham et al 2007; Horowitz et al 2007);
- interventions that include individual skills training with enhancements to the school environment (e.g. improving student participation and relationships, building sense of security/trust (Bond et al 2004; Sawyer et al 2007); and
- interventions targeting both individual skills training and family protective factors (e.g. parent education) (Shochet & Ham 2004; Barrett et al 2005; Mason et al 2007).

Overall, there is mixed evidence regarding the effectiveness of these interventions as a universal prevention strategy for depression among adolescents or to recommend one intervention over another. There is some evidence of small but significant reductions in depressive symptoms in the short term, although these were not maintained at 12 months after the intervention.

The findings of the SLR replicate those of the Cochrane review by Merry et al (2004b), which also found no long-term symptom reduction from universal prevention programs. It should be noted that school-based universal interventions might have other benefits such as improvements in pro-social behaviours, coping skills, mental health literacy and help-seeking. These outcomes require further investigation.

The SLR found evidence from one US study (Mason et al 2007) suggesting that parent training, held when the child is in early adolescence (mean age 11.4 years), may have long-term (if small) benefits during later adolescence. Further studies are needed to expand the evidence base in this area. Generally, interventions that aim to involve parents are susceptible to low recruitment and poor parental attendance.

Recommendation 1	Grade
Psychosocial interventions of the types investigated to date are not currently recommended for universal prevention of depressive symptoms or major depressive disorder in the adolescent population. More research is needed to identify effective approaches.	A

It is premature to conclude whether psychosocial interventions can be recommended for universal prevention of depressive symptoms or major depressive disorder in the adolescent population. However, more promising results have been obtained when programs combine cognitive behavioural and interpersonal perspectives and are implemented by mental health professionals with small groups of young people.

B2.2.2 Selective prevention among adolescents

Studies reporting on selective prevention in children and adolescents have focused on a wide range of risk factors for depression, including family bereavement, parental separation and divorce (Sandler et al 1992; Beardslee et 1997), early leaving of high school (Thompson et al 2001; Eggert et al 1995), diabetes (Grey et al 1998; Grey et al 2000), ethnic minority status and low income (Cardemil et al 2007) and personality risk factors for psychopathy (Castellanos & Conrod 2006). Approaches have included psychosocial interventions, such as cognitive behavioural approaches and skills training, and family-focused interventions.

These psychosocial interventions usually aim to teach the adolescent to change his or her cognitions and behaviours in a way that will reduce the risk of developing depression. The evidence concerning high school leavers was inconsistent, although Counsellors Care and Coping and Support Training showed promise in being able to reduce depressive symptoms and suicidal thinking. There was no evidence on their ability to prevent major depressive disorder.

Despite differences in the styles of treatment and the type of 'at risk' populations, available studies into family-focused selective prevention strategies (Sandler et al 1992; Beardslee et al 1997; Wolchik et al 2002; Beardslee et al 2007; Connell & Dishion 2008) were relatively consistent that these interventions (involving both parent(s) and children/adolescents) were effective compared to control conditions (no intervention or wait-list conditions) at reducing depressive symptoms, improving functioning, and reducing the number of children/adolescents who developed depression.

Recommendation 2	Grade
For children who experience a family-related risk factor for depression, family-focused interventions should be considered for the prevention of major depressive disorder in adolescence.	B

Areas for future research in selective prevention of depression in adolescents include:

- selective prevention targeting adolescents with chronic medical conditions (e.g. diabetes), physical disabilities, personality risk factors, or in an at-risk sociocultural group (e.g. sexual minority and gender diverse); and
- selective prevention targeting foster children and children with substantiated abuse experience (although from a practical and ethical perspective these are difficult groups to access and in which to apply rigorous research methodologies).

B2.2.3 Indicated prevention among adolescents

Studies on preventing depression in adolescents with high levels of depressive symptoms who do not meet diagnostic criteria for major depressive disorder have investigated cognitive behavioural interventions (Clarke et al 1995; Congleton 1996; Lamb et al 1998; Clarke et al 2001; Puskar et al 2003; Lynch et al 2005; Gillham et al 2006a; 2006b; Martinovic et al 2006; Sheffield et al 2006; Stice et al 2007; Szigethy et al 2007; Stice et al 2008; Van Voorhees et al 2008b) and interpersonal psychotherapy (IPT) (Young et al 2006).

Cognitive behavioural interventions are a promising treatment for adolescents with subsyndromal depression, given evidence that cognitive behavioural therapy (CBT) can improve functioning and quality of life, and reduce the average level of depressive symptoms reported when measured soon after completion of sessions. However, within 1 year of the sessions concluding, the impact on functioning and depressive symptoms is no longer consistently reported. Likewise, the evidence is inconclusive regarding whether cognitive behavioural interventions are effective in preventing the onset of clinical depression over a 6-month to 4-year period following the intervention. No harms were reported as a result of cognitive behavioural interventions. The Cochrane review by Merry et al (2004b) found similar effects for indicated interventions immediately post-delivery, with no longer term effects.

The SLR found evidence from one study favouring interpersonal psychotherapy (IPT) over school counselling delivered by guidance counsellors or social workers as a means of reducing depressive symptoms and improving quality of life in adolescents (Young et al 2006). There is evidence suggesting that IPT may also be effective in preventing transition to a major depressive episode (Young et al 2006), but longer term effects are not yet determined and more research is needed to replicate the findings.

Bibliotherapy (providing cognitive theory in book format and encouragement to read it) (Ackerson et al 1998) may reduce depressive symptoms in the short term, would adapt easily to being provided as an online intervention and is an area for future research.

Recommendation 3	Grade
Cognitive behavioural interventions should be considered for short-term symptom reduction in adolescents with identified depressive symptoms who do not meet diagnostic criteria for major depressive disorder.	B

B2.3 Prevention of depression among young adults

B2.3.1 Universal prevention among young adults

Universal programs to prevent depression in young adults have included preventive programs conducted in childhood (Aronen & Arajärvi 2000) and psychosocial interventions conducted among specific groups of young adults — university students (Cannici & Poulton 1990; Johansson 1991; Braithwaite & Fincham 2007; Cukrowicz & Joiner 2007; Seligman et al 2007; Steinhardt & Dolbier 2008) and Navy recruits (Williams et al 2007).

There is insufficient evidence to assess the benefits of approaches targeting children in reducing the likelihood of depression in young adulthood. While it is plausible that psychosocial interventions (including computer-based interventions) targeting young adults may improve depressive symptoms and relationship functioning in the short term, these interventions may not be effective in all settings and their potential to prevent depressive disorders rather than symptoms is not known.

Other approaches to preventing depression in young adults, including the use of B-complex vitamins or multivitamins (America & Milling 2008) and meditation (Tang et al 2007), may be areas for future research.

B2.3.2 Selective prevention among young adults

Studies into selective prevention of depression in young adults have focused on risk factors including poor family relationships, low socioeconomic status, pessimistic attributional style, body image concerns, high stress, being incarcerated or under formal protection, having suicidal thinking or being bullied. Interventions have included:

- early educational child care in infants and children deemed at risk of developing depression in later life due to low socioeconomic status or indicators of poor family adjustment (McLaughlin et al 2007);
- cognitive behavioural approaches in young adults at risk of developing depression, due to a pessimistic attributional style (Seligman et al 1999) or body image concerns (Bearman et al 2003);
- problem-solving therapy for incarcerated young adults considered at risk due to suicidal thinking, poor coping skills or being bullied (Biggam & Power 2002); and
- emotion-based or goals-focused writing for university students experiencing moderate to high levels of stress (Austenfeld 2007).

It is not possible from these studies to determine whether there is a clinically important difference between psychosocial intervention and no intervention in the short term in young adults with a pessimistic attributional style; young adults who are suicidal, incarcerated, under formal protection or being bullied; or young adults with body dissatisfaction (although there is trend in evidence towards supporting the use of psychosocial interventions in the latter group). Emotionally disclosive writing did not appear to have an effect on symptoms in young adults at risk of developing depression.

The use of educational child care from birth to 5 years in high-risk families as a means of preventing depression in young adults may be an area for future research.

B2.3.3 Indicated prevention among young adults

Studies into indicated prevention for young adults have investigated the effectiveness of cognitive behavioural interventions (Peden et al 2000; 2001; Williams et al 2004; Seligman et al 2007) and IPT (Forsyth 2001).

From the studies reviewed there is no evidence that cognitive behavioural approaches reduce depressive symptoms in the long term or prevent major depressive disorder. However, there is some evidence that cognitive behavioural interventions reduce depressive symptoms, compared to no intervention, in the short term (up to 6 months) in students. There is limited evidence favouring IPT over a wait-list control group for reducing depressive symptoms in the short term.

In addition to more studies of CBT and IPT, other approaches to indicated prevention of depression in young adults, including adventure-based therapy (Richardson 2003) and yoga (Woolery et al 2004), are areas for future research.

Good practice points

1 Given the lack of evidence in young adults, it is strongly recommended that strategies to prevent major depressive disorder in this age group be a focus for continuing research.

2 Preventive strategies in young adults should be guided by findings in adolescents until more evidence is available.

B2.4 Key challenges in prevention

The relative lack of current evidence to support preventive interventions does not mean that attempts to prevent depression should not be undertaken, but that continuing research is warranted. Benefits of preventive approaches apart from the outcomes investigated should also be taken into account.

Research priorities in prevention are also discussed in Part D.

Universal prevention

Most studies to date have used prevention of depression and reduction in depressive symptoms as the main outcomes. However, population-based prevention strategies may have a wide range of other benefits; for example, in improving mental health literacy, increasing help-seeking behaviours and decreasing stigma associated with mental health problems. It is important to continue investigating the potential impact of universal interventions on mental health literacy, stigma and consumer confidence in seeking help.

Table B2.2 Challenges in a universal prevention approach

• How to increase the strength of effects to produce sustained changes in risk and protective factors that influence development of depression
• How to maintain these changes over time and thus produce a sustained protective effect upon depression in young people
• What is the optimal age to intervene and thereby deliver the greatest benefit

Selective prevention

Further work is required to:

- identify which patterns of risk and protective factors are most amenable to change and, if changed, are most likely to lead to prevention of depression; and
- match specific target groups with a particular intervention; for example, young people with biological risk factors (e.g. chronic illness) may benefit from a psychological intervention while parent risk factors (e.g. parent death) or social factors (e.g. homelessness, poverty) may require family and/or multisystem interventions.

As well, intervention aims such as the individual developing a sense of self-efficacy, optimism about the future and proactive help-seeking behaviour may be more beneficial in the long term than symptom reduction. Other benefits may include improved mental health literacy and recognition by parents and carers of signs and symptoms of depression in adolescents.

Table B2.3 Challenges in a selective prevention approach

Target groups	What age group to target (e.g. pre-adolescent or adolescent) How best to engage the target age group How best to engage parents Single versus multiple risk factors
Identifying criteria	What assessment screening scale to use (see Appendix 5, p123) Which risk factors to target Child/adolescent factors (e.g. identified as at risk by teachers; recent parental death) Parental factors (e.g. at least one parent with depressive disorder)
Nature of intervention	Aim of program (e.g. improve mother-child relationship; increase positive exchanges between family members) Duration of intervention Approaches (e.g. workshop with other families, motivational interviewing) Providers (e.g. delivery by trained family advisers, health professionals) Setting (e.g. school, health centre) Cost-benefit analysis

Indicated prevention

Depressive symptoms may be the result of a range of adversities and vulnerabilities; for instance, indicated prevention studies cited in the SLR include youth with co-occurring epilepsy, inflammatory bowel disease and depressed parents. While cognitive behavioural interventions appear effective for reducing symptoms in the short term across these diverse presentations, tailoring the interventions or offering adjunctive interventions to cognitive behavioural interventions that are specific to the presentation may result in more effective outcomes. Cognitive behavioural approaches are well suited to individualised therapy, as they consider information that is specific to a particular individual or member of an at-risk group.

Table B2.4 Challenges in an indicated prevention approach

Target groups	What age group to target (e.g. pre-adolescent or adolescent) How best to engage the target age group How best to engage parents Benefit of parent involvement versus youth-focused interventions
Identifying criteria	What assessment screening scale to use (see Appendix 5, p123) What level of severity of symptoms to identify as ‘at risk’ Child/adolescent factors (e.g. depressive symptoms)
Nature of intervention	Aim of program (e.g. reduce symptoms in the short term) Approaches (e.g. motivational or brief interviewing; problem-solving training; small group session; internet-based) Duration of intervention Provider (e.g. school counsellor; teacher; community mental health professional) Setting (e.g. school, health centre) Strategies to maintain the effects Cost-benefit analysis

PART C Clinical care

This part of the Guidelines discusses the clinical care of young people with depressive symptoms or disorder.

- Section C1 gives guidance on providing welcoming and inclusive services, engaging young people and building a good therapeutic relationship.
- Section C2 gives guidance about assessing young people with symptoms of depression, including clinical assessment and the process of diagnosis.
- Section C3 provides a summary of current evidence on managing depressive disorders from the SLR undertaken for the Guidelines, and gives evidence-based recommendations and good practice points on psychological and pharmacological interventions.
- Section C4 outlines continuing management, including management of severe depression and prevention of relapse; this is based mainly on evidence in older adults, as there is a paucity of consistent evidence relevant to young people.
- Section C5 gives the evidence on the management of bipolar disorder, based on research articles, international guidelines and Cochrane reviews on adults, as there is very little published evidence relating to managing bipolar disorder in young people.

C1 Engagement and the therapeutic relationship

A supportive and collaborative relationship between the health professional and both the young person and the parents or carers is likely to provide a stable, accepting and supportive context within which treatment may take place. Best practice in establishing a therapeutic relationship occurs within a setting that is appropriate to young people, with a health professional who has appropriate communication skills, is culturally responsive and is able to gain the trust of the young person.

This section gives guidance on providing welcoming and inclusive services (Section C1.1) and establishing and maintaining an effective therapeutic relationship (Section C1.2), with specific attention given to the areas of confidentiality (Section C1.3) and parent/carer involvement (Section C1.4).

C1.1 Providing welcoming and inclusive services

Health services can assist in engaging young people by providing settings where they feel comfortable and safe, regardless of their background or circumstances.

C1.1.1 Ensuring services are youth friendly

There is growing recognition that young people need services that are sensitive to their unique stage of biological, cognitive, and psychosocial transition into adulthood (Tylee et al 2007). Based on global consultation in 2000 and discussions by an expert working group, the World Health Organization (WHO) identified that youth-friendly services need to be equitable, accessible, acceptable, appropriate, comprehensive, effective and efficient. These attributes are underpinned by policies that fulfil the rights of young people, as outlined in the United Nations Convention on the Rights of the Child and other instruments and declarations. Measures that can be undertaken to improve the quality of care for young people at the health service level are outlined in the table below.

Table C1.1 Key features of youth-friendly health care

Healthcare facilities:	• Provide a safe environment at a convenient location with an appealing ambience • Have convenient working hours • Offer privacy and avoid stigma • Have processes to ensure easy and confidential registration and retrieval and storage of records • Provide consultations for young people with or without an appointment and aim for short waiting times and (where necessary) swift referral
Healthcare professionals:	• Are technically competent in youth-specific areas, and offer health promotion, prevention, treatment and care relevant to each young person's maturation and social circumstances • Have interpersonal and communication skills • Are motivated and supported • Are non-judgemental and considerate, easy to relate to and trustworthy • Devote adequate time to the young person's needs • Act in the best interests of young people • Treat all people with equal care and respect • Provide information and support to enable each young person to make the right free choices for his or her unique needs
Health care provided:	• Addresses each young person's physical, social and psychological health and development needs • Makes available a comprehensive package of health care and referral to other relevant services • Does not include unnecessary procedures • Is guided by evidence-based protocols and guidelines
Support staff:	• Are understanding and considerate • Treat each young person with equal care and respect • Are competent, motivated and well supported
Involvement	• Young people are well informed about services and their rights, encouraged to respect the rights of others, and involved in service assessment and provision • There is community involvement and dialogue to promote the value of health services and encourage parental and community support

Sources: Based on WHO (2002) and Tylee et al (2007).

C1.1.2 Ensuring services are socioculturally responsive

To engage young people from a wide range of backgrounds, health services need to ensure that their approach is informed by the needs of sociocultural groups within their community and that care is provided by health professionals who are 'culturally responsive'. This includes:

- taking a 'step-down', non-expert position that facilitates all young people in being open about their particular situation, whatever their background or circumstances;
- acknowledging customs of the individual and family's culture of origin;
- understanding differences in inter-family relating (e.g. youth relationships with parents and with other authority figures) and the possibility of religious and spiritual factors; and
- having a basic knowledge about the challenges facing young people in the community who experience mental health problems at a disproportionate rate in comparison to their peers (e.g. Aboriginal and Torres Strait Islander youth, young people from a sexual minority and gender diverse group, refugee and homeless youth).

The NHMRC *Cultural Competency in Health: A Guide for Policy, Partnerships and Participation* (NHMRC 2006) provides advice on integrating cultural issues into health care. The following table outlines factors that may assist in improving access to services for specific sociocultural groups.

Table C1.2 Factors that may assist in improving access to services for specific sociocultural groups

Aboriginal and Torres Strait Islander youth (Hayman et al 2009)
• Employing Aboriginal and Torres Strait Islander staff as health workers, on reception and as liaison officers • Ensuring cultural responsiveness of healthcare professionals (AHMAC 2004) • Providing culturally appropriate resources (including local adaptation of materials) • Providing a culturally appropriate waiting room (e.g. culturally appropriate posters and artefacts) • Disseminating information about services available within the health service • Promoting intersectoral collaboration
Youth from a sexual minority and gender diverse group (VMACGLBTIHW 2009)
• Educating staff about issues that may affect individuals from a sexual minority and gender diverse group and ways to facilitate staff-client communication • Recommending procedures for confidentiality and sexual minority and gender diverse inclusive documentation • Developing and reviewing a directory of appropriate or specific counselling services, medical services and support groups to which young people can be referred as needed
Refugee youth
• Providing social support, for example through ethnic-specific cultural liaison officers • Ensuring cultural responsiveness among health professionals • Providing education, including linguistically appropriate information • Developing culturally appropriate resources, including resources in spoken format for young people who lack literacy in their own languages, and access to interpreter services during appointments
Young people leaving foster care or who are homeless
• Investigating ongoing developmental and financial support for young people leaving formal care • Providing specific teams/centres for young people at risk of homelessness or who are homeless

C1.2 Fostering engagement and establishing a therapeutic relationship

The therapeutic relationship is the means by which a health professional hopes to engage with a young person and facilitate therapeutic change. There is considerable evidence that the therapeutic relationship is a consistent predictor of positive outcomes among adults (Shirk et al 2008). While there is less evidence about therapy with young people, it seems likely that the therapeutic relationship may be equally if not more important in this age group, as young people may enter into therapy unaware of their problems, in conflict with their parents, and/or resistant to change (Karver et al 2006).

Factors that have been identified in qualitative studies as important to adolescents in their interactions with health professionals in community-based care include (Freake et al 2007):

- what I tell them is confidential;
- they explain things and give me information and advice;
- they listen to me;
- they are kind, caring, sympathetic, understanding;
- I can trust them;
- they are competent, experienced and qualified;
- they don't patronise me or treat me like a child;
- they are non-judgemental;
- I feel comfortable and it's easy to talk;
- I get to see the same person each time; and
- I am treated as an individual not just as part of their job.

Health professionals, young people and parents/carers tend to bring different experiences and beliefs to the therapeutic relationship. Health professionals can make use of this information to address any deficiencies in their own knowledge, as well as to gain insight about the seriousness of the symptoms or the benefit of therapeutic engagement (Goodwin et al 2009).

Many health professionals find creative approaches to be a useful aid to engagement that is consistent with young people's usual experiences as well as being perceived as less threatening than talking about their current challenges. Various forms of visual art, music, creative writing and journalling can help to develop a therapeutic relationship. The content of such activities can subsequently or concurrently be used in more formal interventions such as cognitive behavioural therapy (CBT).

If it is proving difficult to establish an effective relationship with the young person and/or parents/carers, this should be the topic of an open discussion with all those involved. Consideration should be given to referring the family to an alternative health professional; however, this should never be done suddenly.

Table C1.3 Tips for fostering engagement with young people

Explain confidentiality (see Section C1.3)
Speak to the young person directly, as well as to parents or carers (where appropriate)
Treat the young person as responsible and capable of contributing to decision-making
Take a curious, non-intrusive and respectful stance
Be open and honest as much as possible
Clarify what the young person wants from you
Establish agreed goals or explain clearly why you cannot help
Balance talking about what the young person wants with what you think might help
Be honestly interested in what the young person has to say
Be yourself, don't fake it
Use metaphor and humour (when appropriate) to build rapport
Use language that is clear and easily understood and avoid jargon; overuse of slang is probably worse than not using it at all
Check regularly that the young person has understood what you are saying
Provide information
Warn the young person if you are going to ask questions about topics that may be difficult (e.g. sexual matters)
Be flexible; tailor what you do and how you do it to the situation
Avoid being judgemental by showing empathy and tolerance while still expressing concern for the young person's safety or wellbeing
Avoid getting into a controlling, authoritarian position by explaining your concerns if and when they arise and the rationale behind your actions
Remember, engagement might wax and wane, and requires attention throughout the care of an individual

Source: Chanen & McCutcheon (2008).

Good practice point

3 Health professionals involved in the care of young people must take the time to build strong therapeutic relationships, which will form the basis of continuing care.

C1.3 Confidentiality

It is important to fully explain confidentiality policies to young people in their first session and to outline the information that will be shared if confidentiality has to be breached. Key points to cover include:

- discussions between patients and health professionals are private and any information shared between them is treated with respect;
- health professionals are used to discussing sensitive issues and being open and honest will benefit the young person;
- the young person can request information or phone calls not to go to his or her home;
- permission will be sought if the health professional feels that sharing information about the young person with other professionals or health services may improve care;
- confidentiality may not be kept if there is a concern that the young person may harm him or herself or another person, or is experiencing abuse or neglect;
- in the above situations, only information relevant to the risk will be shared and the young person can be involved so that it is done in the best possible way for him or her.

Many jurisdictions are guided by case law, including Gillick competence, where in some circumstances an adolescent under the age of 16 years can give valid consent to medical treatment without the agreement or knowledge of parents. However, when considering confidentiality of younger adolescents, the rights of the parents should be respected. In older adolescents and young adults, achieving a balance between confidentiality and parent/carer involvement is particularly important.

Reporting requirements for the health professional vary by jurisdiction, depending on the mental health and child protection acts in that State/Territory.

Good practice point

4 Young people are acutely aware of confidentiality issues. Health professionals should have a clear understanding of such issues and the training and skills to discuss confidentiality with young people.

C1.4 Parent/carer involvement

The clinical care of young people experiencing symptoms of depression is likely to be more successful if parents or carers (e.g. other family members) are informed and involved. Although the relationship between young people and their parents/carers changes during adolescence, people in this role remain influential in a young person's life (Robinson et al 2010). In younger adolescents, a therapeutic relationship with both the young person and the parents/carers may support ongoing care. As the young person grows and develops, this will change and less reliance on the parents/carers will be required. When this occurs is variable and depends on the maturity of the young person and his or her wishes. If a young person has an intellectual disability, parent/carer involvement is likely to continue.

While the involvement of parents/carers in a young person's health care is clearly important and desirable, evidence for any benefit from mandatory parent involvement is lacking (Sanci et al 2005). As outlined above, there is legal recognition of the rights of 'mature minors' who are judged cognitively able to make decisions about their medical treatment and to receive confidential health care (Sanci et al 2005). Treating a young person without the involvement of parents/carers might be necessary when:

- the young person cannot rely on their support or they contribute to the stresses the young person is experiencing (e.g. through abuse, homophobia);
- they are opposed to the young person's wishes or likely to undermine effective treatments (to which the young person is able to give informed consent);
- mental health problems in the parent(s) affect presentation and engagement; or
- the young person does not reside with his or her family of origin (e.g. is homeless or in foster care).

It is important to try to establish early in the therapeutic relationship what the young person prefers and whether there are specific reasons for not wanting parent/carer involvement, such as stigma, shame or previous adverse clinical experiences. It is often helpful to describe the pitfalls of not involving parents/carers, such as lack of support or difficulties with continuing therapy if this is without family support. In such cases, assessment of the young person's capacity to give informed consent should be clearly documented. Parent/carer involvement might vary over time and initial refusal to include family members might be revisited at a later date, especially when issues of stigma or shame have been addressed. In practice, it can be helpful to work with young people to encourage them to involve parents or carers, even while maintaining confidentiality, if it is clinically warranted.

Where parents/carers are involved, it can be helpful for them to attend the first and last few minutes of any appointment, particularly if the young person has trouble articulating his or her feelings and moods. As well, the health professional can question both on how things have gone since the last appointment and then discuss what action may be required before the next appointment. Whatever the degree of parent/carer involvement, a clear statement should be made that the safety of the young person and others is paramount and that 'duty of care' will prevail (Chanen et al 2009).

Parents/carers may have limited understanding of mental health issues and worry about contributing to the young person's condition by saying or doing the wrong thing. Family therapy can help to facilitate the recovery process.

When the young person's parents/carers are not involved, the health professional should facilitate the involvement of others (e.g. friends), to help to enrich the young person's degree of social support. This should take place without an authoritarian/expert stance and with the young person's consent and cooperation. When using peer support, care should be taken not to place excessive or unrealistic expectations in terms of the contribution from the peer. A peer 'taking on' his or her friend's distress may, in some cases, lead to the unacceptable outcome of that peer developing feelings of lowered mood or hopelessness.

Good practice point

5 In most cases it is beneficial to involve the young person's parents/carers in discussions about his or her care. However, the degree of involvement will depend on the young person's age, stage of development, wishes and circumstances.

C1.5 Partner involvement

With increasing age the likelihood increases of the young person being in a relationship with a partner, sometimes formalised as a *de facto* relationship or marriage. While often a protective factor, there may be associated stressors associated with maintaining the relationship, negotiation of employment and/or education aspirations, dealing with family and parenting issues, and/or differences in leisure priorities. Understanding these systemic issues is important for comprehensive management planning. Involving the partner may be beneficial, however, must follow appropriate consent. Again safety to the individual and others, and duty of care are fundamental considerations.

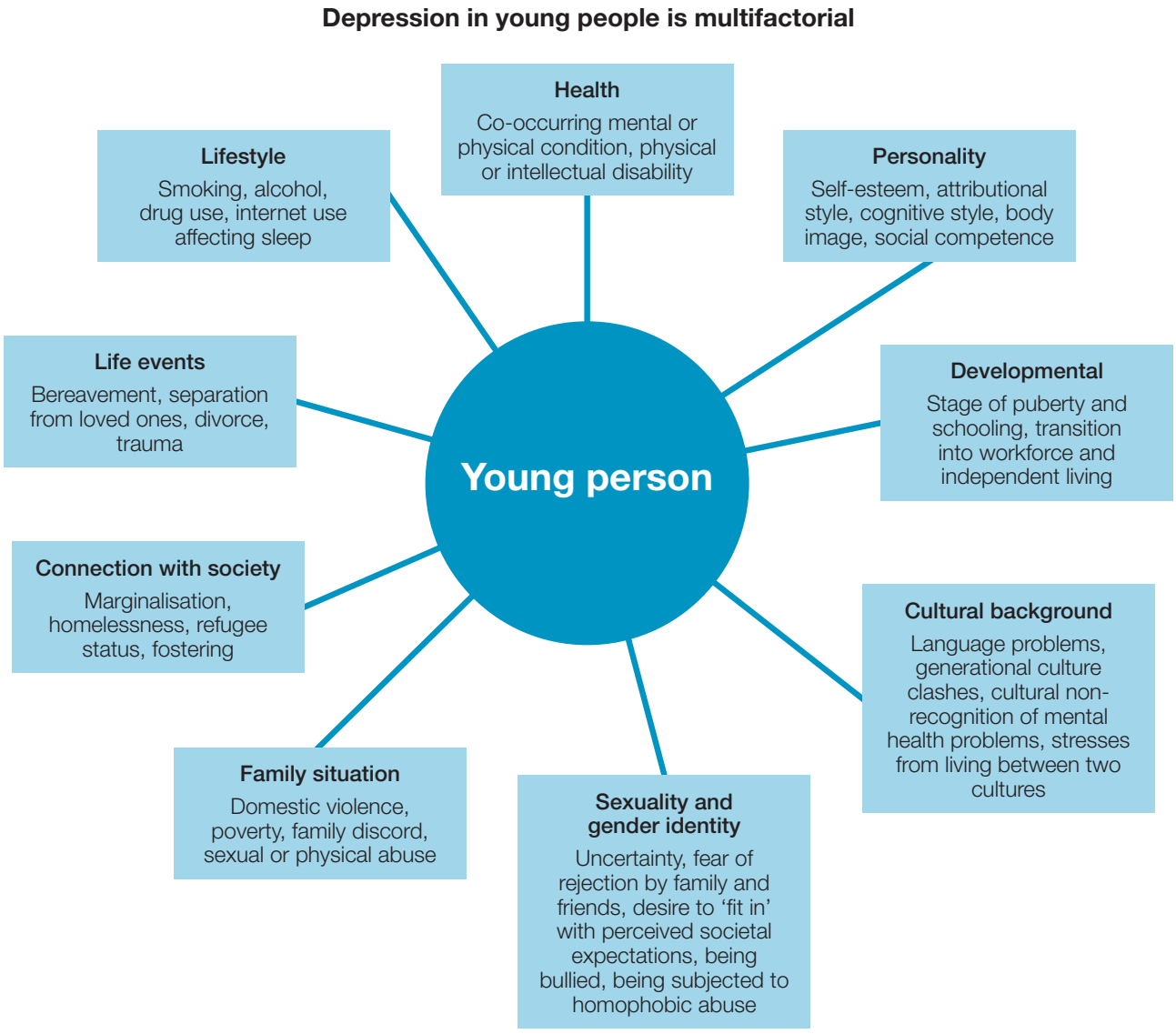
C1.6 Practice summary — engagement and therapeutic relationship

Table C1.4 Checklist — engaging young people and building a therapeutic relationship

When — Providing mental health care to young people	
Who — GP, CAMHS, psychiatrist, psychologist, mental health and other nurse, community healthcare worker, Aboriginal health worker	
Providing appropriate care	
☐ **Provide a setting that is safe and comfortable for youth** and where each young person is treated with care and respect by all staff members.	Section C1.1.1
☐ **Be informed about challenges facing young people**, particularly those who are from population groups that experience mental health problems at a disproportionate rate in comparison to their peers.	Section C1.1.2
☐ **Be open to learning** from each young person about his or her particular situation, including customs of the culture of origin, differences in inter-family relating and religious and spiritual factors.	Section C1.1.2
☐ **Take time** to establish relationships with young people so they feel they can talk freely without being patronised or judged and will receive care and understanding as well as information and advice.	Section C1.2
☐ **Explain confidentiality** to young people, including that their information will be treated with respect and only disclosed if there is a risk of harm to themselves or others.	Section C1.3
☐ **Establish early the level of parent/carer involvement** that the young person prefers, while explaining the benefits of their involvement. If parents/carers are not involved, facilitate the involvement of others (e.g. friends).	Section C1.4

Figure C1.1 Factors to consider in encounters with young people

Every young person's negotiation of present challenges is influenced by his or her past experiences as well as current developmental and sociocultural factors. When assessing mental health in a young person, it is important to look at the whole picture for that individual rather than focusing on symptoms alone. Figure C1.1 highlights examples of the many factors that may influence an individual's mental health and wellbeing.



C2 Assessment of depressive symptoms in young people

A diagnosis of depression can be helpful and provide relief for young people and their parents/carers, as it leads to treatment and, with psychoeducation, reduced feelings of stigma. A diagnosis can also assist communication of mutually understood clinical presentations between health professionals involved in the young person's care.[2]

However, it is important not to label something as depression when it is not. When young people are experiencing distress or depressive symptoms, there may be explanations other than depression, such as grief and loss, trauma or distressing life events, or difficulties in expressing and managing anger, sadness, fear and shame. The assessment process involves helping young people make sense of their experience of normal feelings and reactions as well as identifying the presence and severity of symptoms or disorder. A false diagnosis and labelling can lead to illness behaviour, which is unhelpful for the young person, and to treatments which could have adverse effects of their own.

This section outlines the assessment process, which comprises:

- an initial assessment that aims for understanding of the young person's developmental, familial and sociocultural context as well as his or her mental state (Section C2.1); and
- assessment for depressive symptoms, which may involve the use of assessment tools, and includes consideration of other mental health and physical conditions that may cause depressive symptoms (Section C2.2).

If depressive symptoms are present, further assessment is required to determine the risk of suicide (Section C2.3) and the level and type of support needed (Section C2.4).

These assessments are the first steps in the process of diagnosis, which may require repeat assessments and management of co-occurring conditions to exclude them as causes of depressive symptoms. Throughout the process, approaches should be taken that seek to understand the young person's individual situation. A diagnosis of depression, when it is indicated, should be seen as a 'flag' to guide further actions by the health professional and the young person and his or her parents or carers.

C2.1 Initial clinical assessment

The scope of the initial assessment is partly determined by the setting and degree of urgency. For example, more time for assessment may be available in a long general practice consultation than in the emergency setting and the symptoms experienced by young people presenting at the emergency department are likely to be more severe. Whatever the setting, assessment should take place in a suitable, quiet, confidential space, and ideally should not be interrupted.

C2.1.1 Assessment in the medical setting, including general practice

As outlined in Section C1.2, engaging with young people is necessary so that they feel sufficiently trusting to give a history of their current challenges and difficulties. Staying broad, therefore not immediately enquiring about depressive symptoms, will enrich the health professional's understanding of the young person's place within his or her family, school, employment and local environment.

The initial assessment process includes:

- greeting the young person and establishing the parameters of the assessment;
- taking an interest in the life of the young person beyond his or her current difficulties — this may also be an appropriate time to identify the individual's strengths;
- taking a history of the presenting difficulties, including onset of symptoms;
- placing these difficulties into the context of past and current areas of competence and past difficulties, including previous episodes of depression or other mental health problems and any history of effective or ineffective past interventions;

2 A diagnosis is also necessary for understanding the relevance and applicability of research. For example, the studies reported in this guideline report on either post-treatment changes in depressive symptoms or participants' change in meeting diagnostic criteria as described by ICD-10 or DSM-IV-TR.

- investigating relevant context such as current and past medical history (including medical conditions that may be associated with depression in this age group), family history (discussion with parents will be informative about this), family and parent support and/or conflict, drug and alcohol issues, forensic issues, quality of peer relationships, romantic relationships, and school and/or employment issues;
- performing a mental state examination, which includes assessing the appearance and behaviour of the young person; the flow and form of speech; his or her self-reported mood and what makes mood better or worse; any daily change in mood; recent typical thought processes, especially those of a depressive nature such as pessimism, hopelessness, helplessness; the presence of psychomotor retardation; the presence of any bizarre symptoms of a delusional or hallucinatory form; and an examination of the young person's attention, memory and level of consciousness; and
- specific suicide and self-harm assessment (as appropriate) (see Section C2.3).

Psychosocial assessment

While young people often want to talk to health professionals about a broad range of health concerns, research shows that they are reluctant to disclose sensitive information without being prompted with questions by a health professional (Cheng et al 1993; Booth et al 2004; Sanci et al 2005). Psychosocial assessment provides a powerful tool to promote engagement between the health professional and the young person, while eliciting relevant information about his or her current social context, behaviours and emotional status.

A common framework for psychosocial assessment is the HEADSS tool, which can be used by health professionals as part of any clinical encounter with young people. HEADSS stands for Home, Education, Activities, Drugs, Sexuality and Suicide and Depression. The framework promotes engagement by structuring the questions in a slowly escalating level from relatively 'safe' to more sensitive issues. It has been shown to be well accepted by young people, as long as confidentiality is addressed before the assessment (Ford et al 1997; Sanci et al 2005).

The extent to which the framework is used at each consultation will depend on the age and development of the young person, the frequency of review, and the skill of the health professional (RACP 2008). The information disclosed can then inform the management plan. The mental health questions should be asked by health professionals who have been trained to ask the questions sensitively, and who are able to act on the results of the assessment in a timely and effective manner.

Table C2.1 HEADSS assessment tool

Home
• Who lives with the young person? Where? • Do they have their own room? • What are relationships like at home? • What do parents and relatives do for a living? • Ever institutionalised? Incarcerated? • Recent moves? Running away? • New people in home environment?
Education and employment
• School/grade performance — any recent changes? Any dramatic past changes? • Favourite subjects — worst subjects? (include results) • Any years repeated/classes failed? • Suspension, termination, dropping out? • Future education/employment plans? • Any current or past employment? • Relations with teachers, employers — school, work attendance?

Activities
• On own, with peers (what do you do for fun? where? when?) • With family? • Sports — regular exercise? • Church attendance, clubs, projects? • Hobbies — other activities? • Reading for fun — what? • TV — how much weekly — favorite shows? • Favourite music? • Does young person have car, use seat belts? • History of arrests — acting out — crime?
Drugs
• Use by peers? Use by young person? (include tobacco, alcohol) • Use by family members? (include tobacco, alcohol) • Amounts, frequency, patterns of use/misuse, and car use while intoxicated? • Source — how paid for?
Sexuality
• Orientation? • Degree and types of sexual experience and acts? • Number of partners? • Masturbation? (normalise) • History of pregnancy/abortion? • Sexually transmitted diseases — knowledge and prevention? Contraception? • Frequency of use? • Comfort with sexual activity, enjoyment/ pleasure obtained? History of sexual/physical abuse?
Suicide/depression
• Sleep disorders (usually induction problems, also early/frequent waking or greatly increased sleep and complaints of increasing fatigue)? • Appetite/eating behaviour changes? • Feelings of 'boredom'? • Emotional outbursts and highly impulsive behavior? • History of withdrawal/isolation? • Hopeless/helpless feelings • History of past suicide attempts, depression, psychological counselling • History of suicide attempts in family or peers? • History of recurrent serious 'accidents'? • Psychosomatic symptomatology? • Suicidal thinking (including significant current and past losses)? • Decreased affect on interview, avoidance of eye contact — depression posturing? • Preoccupation with death (clothing, media, music, art)?

Source: Adapted from Goldenring & Cohen (1988) and Goldenring & Rosen (2004).

Other important considerations in assessing young people

- *Other explanations for a young person's distress* — The young person may have feelings of depression, sadness or anger that are associated with changes to sleep, appetite and behaviour rather than with depression. Situations such as grief, exposure to conflict and past and present stressful events may lead to such a response.
- *Developmental, familial and sociocultural context* — Other factors may play a part in developing and maintaining depression. For adolescents, school factors (e.g. school progress and the possibility of bullying, including by text message or email) are likely to be important. For older adolescents and young adults, issues with peers and adaptation to independent living and the work environment may be significant. These factors may not influence the diagnosis, but are important in formulating a management plan. Cultural considerations may also be important — for example, behaviours that can be taken to be signs of a depressive episode (being shy, not interacting, or being softly spoken) may actually reflect discomfort at being in a clinical setting or language difficulties.
- *Considering evidence from multiple informants* — There is a strong clinical and research tradition to seek evidence of depressive symptoms and related functional impairment from other people (parents/carers and/or teachers) as well as from the individual. While all perspectives have validity, some types of information are more compelling from certain informants — for example, parents and teachers accurately and reliably inform on the young person's behaviour and change in functional status, while individuals are the best informants of their own mood state and cognitions (De Los Reyes & Kazdin 2005). Aboriginal health workers or mental health workers can be an invaluable source of collateral history, especially if English is not the young person's first language.

Good practice point

6 With the young person's consent, multiple informants should be involved to assist in identifying possible causes of the young person's distress and providing information about any changes in his or her behaviour or functioning.

C2.1.2 Assessment in the emergency setting

Mental health assessment is common in accident and emergency departments or other settings that see emergencies involving young people. Frequently, individuals are brought to emergency settings by parents/carers, school counsellors, youth workers, ambulance or police officers. In some situations, the relevant Mental Health Act has been employed and the young person is seen as an involuntary patient.

Key considerations of emergency assessments are:

- the safety of the individual:
  - close patient observation until comprehensive assessment has been concluded;
  - comprehensive assessment of current self-harm or suicidal intent;
  - assessment of any recent self-harm including possible undisclosed overdose; and
  - exclusion of delirium or an acute physical emergency as the primary presenting condition;
- the safety of staff:
  - assessments take place in well-observed and monitored examination rooms rather than infrequently accessed and poorly supervised areas;
  - several staff are in attendance if indicated;
  - the emergency unit has up-to-date management protocols and regular training about emergency psychiatry assessments; and
- access to skilled mental health staff, ideally directly, for dedicated mental health assessments or as a consultative service.

See also Section C2.3 (Assessing the risk of suicide).

C2.1.3 Documenting the initial assessment

It usually takes time to establish rapport, elicit symptoms from the individual and gather information from multiple informants. More than one health professional may be seen during this period. It is important to remain open about diagnostic possibilities during the initial assessment period. Major findings, disclosures, family and peer perspectives and alterations in presentation over time must be clearly documented to facilitate and underpin this process. Ideally, information should be clearly recorded in a case management file or on a service-approved assessment template. Areas where adequate information is lacking should be flagged and an active process to obtain missing information undertaken. The process should be mindful of confidentiality issues and the reality that most information is, to some extent, available to other health professionals. Further, all documentation must comply with State/Territory and Commonwealth legislation including freedom of information legislation.

C2.2 Assessment of depressive symptoms

In assessing depressive symptoms and considering a diagnosis of depression, most health professionals will conduct a clinical interview that checks for the presence of symptoms consistent with diagnostic criteria for depression, in line with major international classification systems for depressive conditions — ICD-10 and DSM-IV-TR (diagnostic criteria for these classification systems are given in Appendix 4). Assessment tools may assist this process and consideration is also given to other physical and mental health conditions that may cause depressive symptoms. If depressive symptoms are identified, it is mandatory to include an assessment of suicidal thinking and behaviour (see Section C2.3).

Table C2.2 Brief characterisation of depressive disorders

Dysthymia	Depressed mood or irritability, on **most days** for most of the day, lasting for at least **1 year**, together with **two other symptoms** such as: • changes in appetite and weight; • changes in sleep; • problems with decision-making and concentration; and • low self-esteem, energy and hope.
Major depressive disorder	A depressive episode of at least **2 weeks** duration consisting of either sad or irritable mood or anhedonia (loss of the normal pleasure response), together with **at least five other symptoms** such as: • social withdrawal; • worthlessness; • guilt; • suicidal thinking or behaviour; • sleep increase or decrease; • decreased motivation or concentration; and • increased or decreased appetite. For a diagnosis of major depressive disorder, these symptoms must cause clinically significant distress or impaired social, occupational or other functioning, represent a change from previous functioning, and must not be attributable to substance use, medication or other psychiatric or medical illness.
Bipolar I disorder	History of manic or hypomanic episodes. Usually also a history of one or more episodes of major depressive disorder.
Bipolar II disorder	At least one hypomanic episode and at least one major depressive episode. Depressive episodes are more frequent and more intense than manic episodes.

C2.2.1 Assessment questionnaires, scales and interviews

A wide variety of questionnaires, scales and tools are used to assist the process of diagnosis. These range from standardised structured interviews to self-report rating scales of depressive symptoms. Structured instruments are used in research studies and are highly prescriptive, to the point of giving the exact wording of the questions to be asked. Structured interviews are precise and can be used to estimate the prevalence of various diagnoses and quantify depressive symptoms and adverse effects. However, they are lengthy, may appear overly scripted and formal, and are not practical for widespread use in clinical practice.

Brief screening tools and rating scales are useful as initial measures of generalised distress and depressive symptoms. While they do not provide a diagnosis, they can assist health professionals in decision-making about whether further assessment is required to exclude depression or another mental health disorder. The tools are either clinical assessment scales (which are measures of symptoms, functioning and disability completed by the health professional) or consumer self-reports (which are measures of problems, symptoms or distress). These tools have been validated in general populations and appear not to be biased with respect to sex and level of education. However, they may not be useful in specific populations (see *Cultural considerations* below).

Questionnaires that focus specifically on depressive symptoms (e.g. Reynolds Adolescent Depression Scale [RADS]; Center for Epidemiologic Studies Depression Scale [CES-D]; Hospital Anxiety and Depression Scale [HADS]; Children's Depression Inventory [CDI]; Beck Depression Inventory [BDI]) provide a stronger indicator of depression than more general mental health questionnaires (e.g. Strengths and Difficulties Questionnaire [SDQ]; Kessler Psychological Distress Scale [K6 and K10]; Child Behaviour Checklist [CBCL]).

The SDQ, a general screening measure of mental health symptoms, can be accessed online (http://www.youthinmind.co.uk), scored immediately and feedback provided by youth-friendly graphical display or a technical report.

The main features of a range of validated assessment tools specific to depression are given in Appendix 5. These Guidelines do not advocate any particular questionnaire or measure. A useful principle is for health professionals to decide on and use a limited set of measures, and become expert at their administration and the interpretation of the clinical significance of the test results. This strategy also lends itself to repeating the same measure post-treatment and during follow-up and monitoring phases of care.

Cultural considerations

Accurately assessing depression in Aboriginal and Torres Strait Islander young people or young people from culturally and linguistically diverse backgrounds is complex as cultural issues can misrepresent abilities or states of mental health (Drew 2000).

Several instruments have been translated into a range of languages, including the K10, SDQ and Mini Mental Health Examination. Printable versions of the SDQ in more than 20 languages are available. The Youth Self Report (Achenbach & Rescorla 2001) has been used to assess self-rated problems in many societies (Ivanova et al 2007).

The Westerman Aboriginal Symptom Checklist—Youth (WASC-Y) (Westerman 2002; 2003) is a tool for early identification of depression, anxiety, suicidal behaviours and self-esteem problems in Aboriginal young people in the 13 to 17 year age group.

C2.2.2 Assessing the severity of a depressive episode

In assessing the severity of a depressive episode, it is important to examine the frequency, duration and strength of symptoms and their impact on the young person's functioning (see Table C2.2 and Appendix 4). While the number of symptoms provides an indication of severity, clinical judgement is required — for example, one prominent severe symptom may cause a similar level of impairment to several moderately severe symptoms. In the ICD-10 classification system, along with agitation and suicidal thinking (enumerated below) the individual's subjective distress, and ideas of worthlessness and guilt are emphasised.

Other considerations in specifying the severity of a depressive episode include:

- the level of social disability and functional impairment;
- whether there is suicidal thinking, active plans or intent (see Section C2.3);
- the level of agitation;
- evidence of self-neglect;
- past history of depressive episodes and response to any previous treatments;
- number of 'somatic' symptoms;
- mental health problems in the family; and
- history of manic episodes.

Standardised depression inventories generally have normative data that may also be useful in determining the severity of depression.

Good practice point

7 A diagnosis of major depressive disorder is based on clinical judgement, including consideration of the young person's level of impairment and whether symptoms are consistent with accepted diagnostic criteria (DSM-IV-TR; ICD-10).

C2.2.3 Excluding other causes for depressive symptoms

Assessing and diagnosing depressive disorders in young people can be complex, particularly where depression is part of a broader constellation of physical and/or other mental health problems. Although variously defined, differential diagnoses are plausible alternatives; that is, a list of diagnoses that may fit the presenting symptoms.

Physical health conditions

Mental health symptoms, including depression and mania, may be the initial or dominant presenting symptom for a range of physical conditions. It is important to explore potential causes of organic depression in young people, such as infections (e.g. glandular fever), endocrine disorders (e.g. diabetes, hypothyroidism), metabolic abnormalities, neoplasms or central nervous system disorders (multiple sclerosis, temporal lobe epilepsy).

Mental health conditions

The clinical interview should always explore the possibility of other mental health problems — where these are suspected, further questioning or additional surveys may clarify the nature of these issues (e.g. anxiety, eating disorders). Appropriate diagnoses of co-occurring conditions can better represent the complexity of the young person's problems and assist development of the management plan.

The differential diagnosis of subtypes of depressive disorder from each other and from non-mood psychiatric disorders can be complex in young people. Many conditions can present with symptoms of irritability and depression. Some of these are disorders in which a mood disorder or depressive symptoms are the main problem, whereas others are conditions in which non-mood symptoms better account for the observed presentation. For example, lowered mood may be brief, time limited and secondary to insight about functional impairment in an adolescent with a severe social phobia. Alternatively, a youth who feels humiliated on a daily basis because of bingeing and self-induced vomiting may appear depressed; however, the diagnosis is bulimia nervosa. This process is aided by asking screening questions about other common mental health disorders in young people (e.g. fear of situations or physical symptoms of anxiety, dieting or unreasonable fear of weight gain) and then carefully delineating which symptoms came first, and which may be secondary to a primary presentation.

Differentiation into the type of depressive disorder is important, to better match the treatment with the individual's presentation. Combined psychological and pharmacological interventions are not warranted for brief presentations such as adjustment disorders with prominent mood symptoms.

Health professionals should be aware that the depressive episode may be a precursor to a bipolar disorder. In young people, bipolar disorder should not be diagnosed in the absence of episodes of mania that consist of a distinct change in mood accompanied by persistent elevation of mood and associated behaviour (Baroni et al 2009). If bipolar disorder is diagnosed, establishing whether the individual has bipolar disorder with a predominance of manic versus depressive relapses will have implications for medications for maintenance therapy (see Goodwin et al 2009).

Substance use

Depressive symptoms are well described during acute drug use (e.g. alcohol and marijuana) and during drug withdrawal (e.g. amphetamines and cocaine). Secondary depression is also well described in reaction to the wider psychosocial implications of substance misuse, including the probability of strained relationships with family, peers and involvement in the legal system. Excluding substance misuse is part of any diagnostic process when treating young people.

C2.2.4 Assessing depressive symptoms in young people with co-occurring conditions

Mental health conditions

A challenge in caring for young people with co-occurring mental health conditions is to ensure that all disorders are diagnosed and treated. Current mental health diagnostic systems allow for reaching multiple diagnoses. Typical conditions co-occurring with depression in young people are anxiety disorder, eating disorders, personality disorder (Kasen et al 2007) and, in adolescents, disruptive behaviour disorders such as attention deficit hyperactivity disorder (ADHD) and conduct disorder.

Physical health conditions

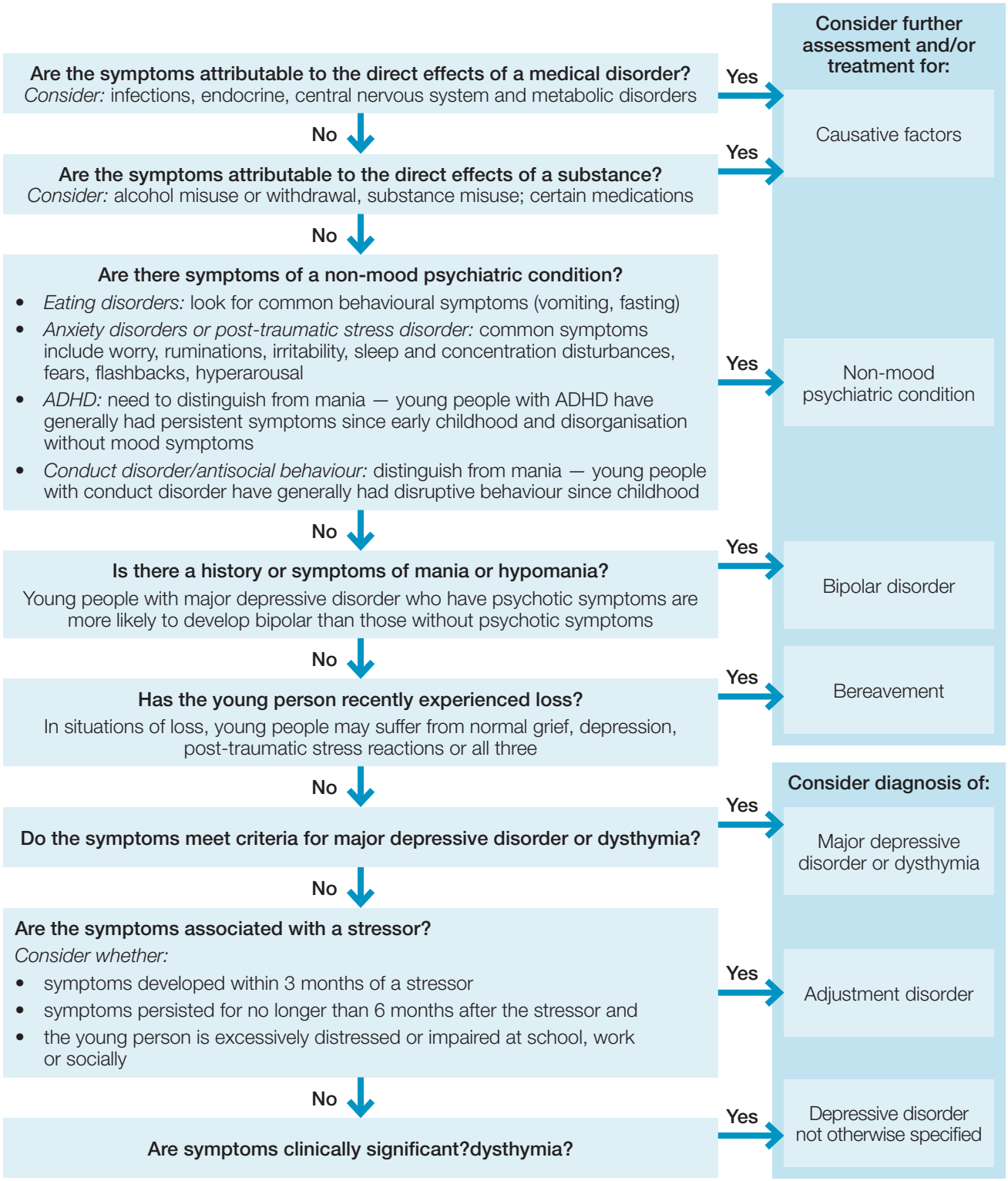
Diagnosis of depressive disorder in young people with physical health conditions is likely to be complex as:

- the symptoms of medical illness and depression can overlap (e.g. lack of energy, weight loss, sleep disturbance);
- a young person may present with depressive symptoms that are secondary to an unsuspected medical disorder;
- a young person with a medical disorder may present with depressive symptoms secondary to medication (e.g. roaccutane, varenicline); or
- a young person may present with medical symptoms, with a mood disorder being suspected if there are risk factors for depression (e.g. family history) and the physical complaints are disproportionate to other findings.

Some rare developmental conditions, usually associated with known genetic abnormalities, have well-established patterns of mental health symptoms ('behavioural phenotypes'). Examples include Prader-Willi Syndrome and Velocardiofacial Syndrome (VCFS).

Individuals with chronic physical illnesses such as diabetes, cystic fibrosis and thalassaemia, or with physical disabilities (e.g. spina bifida) may develop depression. In some instances, referral to mental health services is due to concerns about non-adherence to medication regimes (e.g. insulin) and for challenging behaviours. Detailed assessment may result in a diagnosis of depression. If depressive symptoms in a young person with a medical illness cannot be attributed to organic factors, assessment involves distinguishing between the onset of a co-occurring mood disorder such as major depressive disorder and non-clinical problems arising from difficulty adjusting to the illness or the diagnosis.

Figure C2.1 Process of differential diagnosis



Common issues creating diagnostic uncertainty include:

- clarification of symptomatology (e.g. deciding when lowered mood indicates depression rather than a normal response to a recent stressor);
- when numerous non-depressive symptoms co-occur with mood symptoms (e.g. food restriction, compulsions and rituals, nightmares);
- when systems issues (e.g. parental depression, problematic family functioning) are pronounced; or
- when young people have co-occurring conditions such as intellectual disability or personality disorder that can result in challenging behaviours, visible handicaps and/or pronounced educational difficulties.

Secondary consultation or referral to a mental health specialist is appropriate in these cases.

C2.3 Assessing and responding to the risk of suicide

Young people experiencing depressive symptoms should be asked about suicidal thinking, planning and self-harm behaviour and any past suicide attempt. Research is clear that such enquiry does not induce thoughts of suicide (Gould et al 2005) but provides an opportunity to ensure the safety of the young person and arrange appropriate follow-up care.

Health professionals working with young people should develop a system to assist them in assessing risk of suicide and ensuring appropriate immediate management. The risk of suicide is changeable and some youth demonstrate poor mastery of impulses. Suicide monitoring should therefore be a routine feature of care of this age group.

The following sections have been developed based on resources available through the Australian National Suicide Prevention Strategy (NSPS) website — http://www.livingisforeveryone.com.au. More detailed information is available on the website, which includes comprehensive resources on suicide prevention strategies, risk and protective factors, the relationship between mental health and suicide and issues specific to certain groups such as residents of Aboriginal and Torres Strait Islander and rural and remote communities. The site also includes a specific section concerning youth. Health professionals are encouraged to review and adapt the resources on this nationally endorsed site and to advise young people and their families about consumer resources available on the website.

C2.3.1 Assessing the risk of suicide

Assessment of risk involves making enquiry into the extent of the young person's suicidal thinking and intent, including:

- *suicidal thinking* — if suicidal thinking is present, how frequent and persistent is it?
- *plan* — if the person has a plan, how detailed and realistic is it?
- *lethality* — what method has the person chosen, and how lethal is it?
- *means* — does the person have the means to carry out the method?
- *past history* — has the person ever planned or attempted suicide?
- *suicide of family member or peer* — has someone close to the person attempted or completed suicide?

Consideration should also be given to:

- *risk and protective factors*;
- *mental state* — hopelessness, despair, psychosis, agitation, shame, anger, guilt, impulsivity;
- *substance use* — current misuse of alcohol or other drugs; and
- *strengths and supports* — availability, willingness and capacity of supports.

Ideally with the young person's consent, his or her parents/carers should be involved in discussion of suicide risk, as they can be an important source of information, including recent behaviour of the person and his or her usual coping capacity. Other sources of information include other health professionals involved in the young person's care, people other than family accompanying the young person to the consultation and, where possible, access to previous files. This enquiry also provides an opportunity to assess the support available to the young person. Where there is a concern that the young person may harm him or herself or another person, contact may be made without his or her consent.

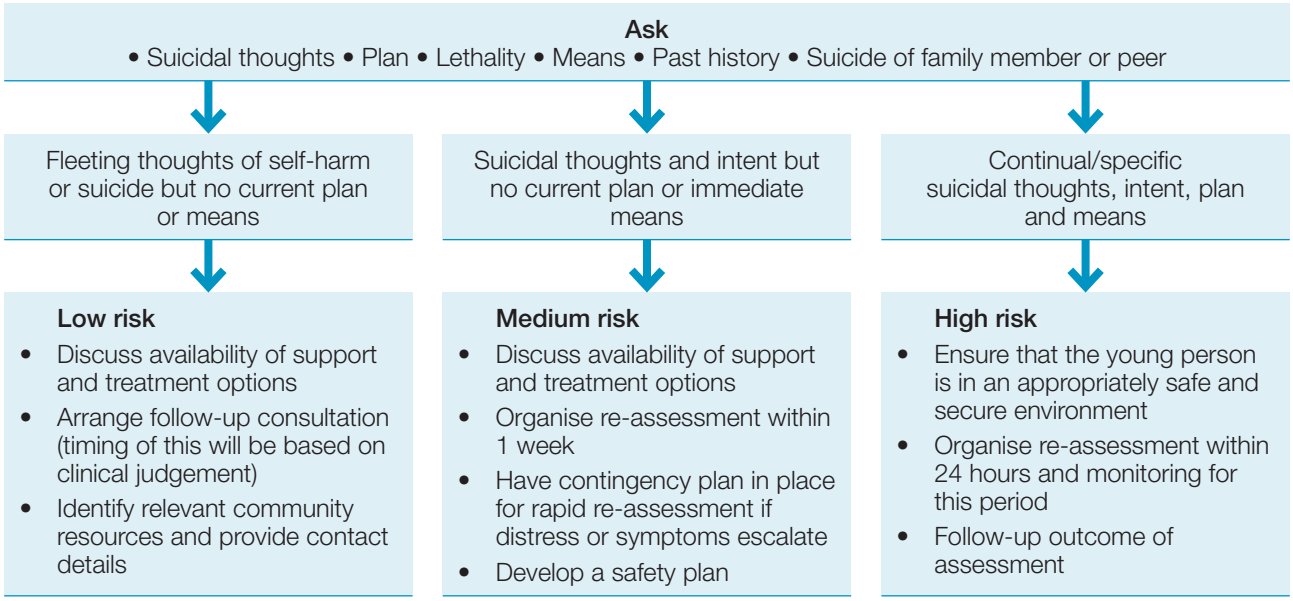
Good practice point

8 Assessment for risk of suicide is an immediate task if depressive symptoms are identified in a young person, with involvement of parents/carers where possible.

C2.3.2 Managing immediate risk of suicide

The following diagram represents some general principles for responding to suicide risk. Care and referral pathways will need to be adapted to individual circumstances and local resources and will be informed by clinical judgement.

Figure C2.2 General responses to identified risk of suicide



C2.3.3 Developing a safety plan

Health professionals should be practiced at collaboratively reaching a safety plan with a young person who is expressing suicidal thinking or planning, or who has recently been involved in suicidal behaviour.

A safety plan is a prioritised written list of coping strategies and sources of support that young people can use when they experience suicidal thinking. The development of a safety plan involves assisting the young person to identify:

- warning signs that he or she may be at risk of imminent suicide (e.g. feeling trapped, worthless or hopeless);
- internal coping strategies that decrease the level of risk;
- people within the young person's network who can assist in times of need; and
- health professionals and agencies that can be contacted for help.

Safety plans should be frequently revisited and modified as needed.

C2.4 Acting on a diagnosis

The type and level of support will depend on individual need and the young person's circumstances.

- If a young person has depressive symptoms but does not meet diagnostic criteria for a depressive disorder, or has dysthymia or mild depression, he or she may benefit from the informal support provided by family, teachers and friends and can usually be cared for in a community setting (e.g. by a school counsellor or GP).
- When a young person is identified as having mental health issues that are developing into a more serious depressive problem, he or she may be able to be cared for in a primary care setting if appropriate clinical expertise is available, or may be referred to a professional with more specific mental health expertise, such as a psychologist, psychotherapist or psychiatrist.
- When a young person has more complex mental health problems or has been diagnosed as having a serious mental health disorder, he or she usually requires multidisciplinary team care through specialist mental health services. Identification of serious risk of self-harm may lead to hospital admission in some circumstances (see Section C4.4.3).
- When a young person has a co-occurring condition, a multidisciplinary team approach that includes health professionals from different services (e.g. GP, mental health professional, drug and alcohol service) may be beneficial (See Section C4.4.1).

Decisions about referral will depend on the skill and experience of the health professional involved. If young people require referral, it is important to discuss with them and their parents/carers all relevant information about the process of care, including where they are being referred to, and the likely costs and relevant Medicare rebates for mental health care that may facilitate their treatment.[3] The *beyondblue Directory of Medical and Allied Health Practitioners in Mental Health* is a helpful online resource (http://www.beyondblue.org.au).

Examples of appropriate actions in response to a diagnosis, according to severity, are given in Section C3.1.2.

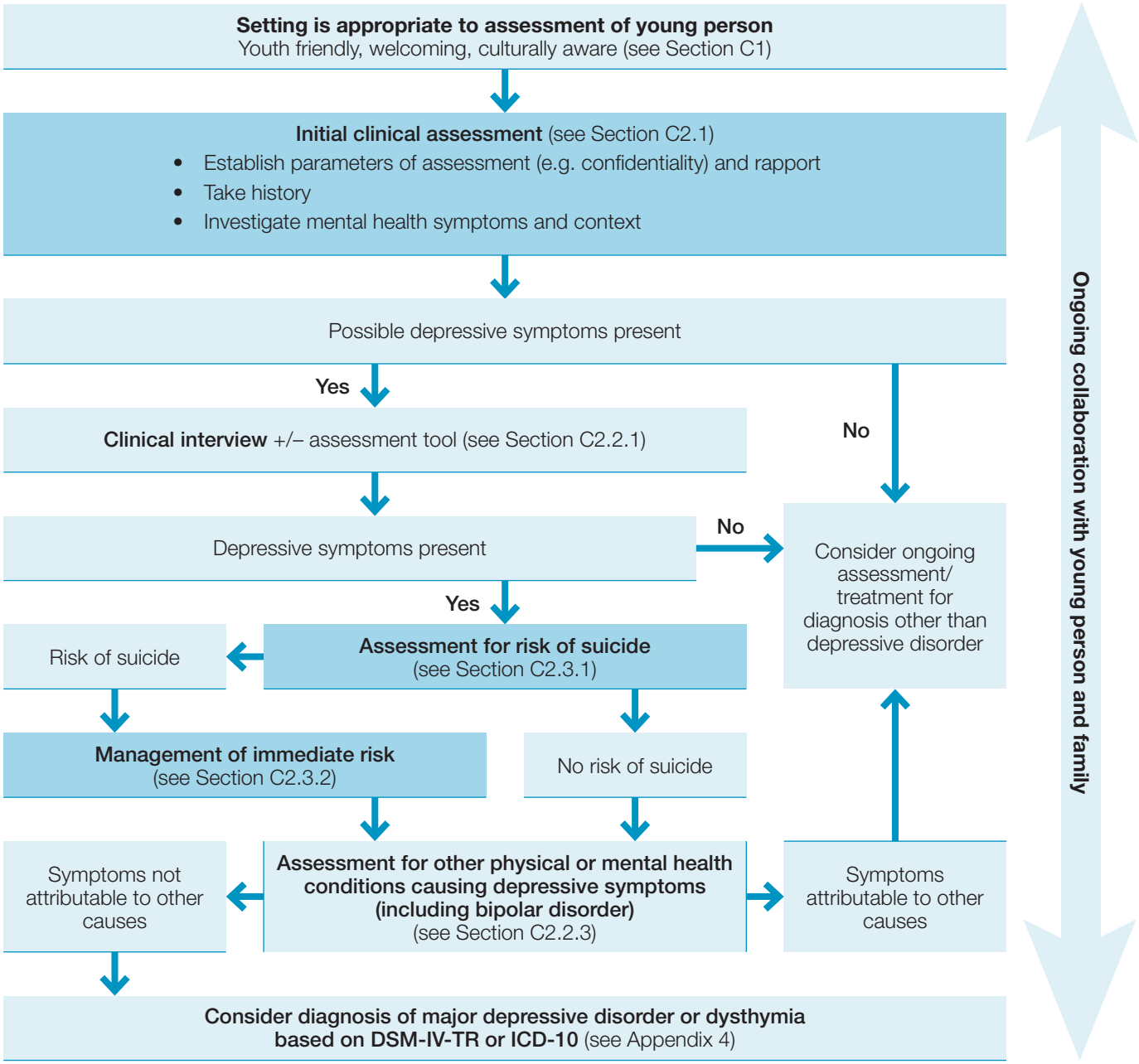
3 Information about mental health care Medicare items can be found at http://www.quitnow.info.au/internet/main/publishing.nsf/Content/health-pcd-gp-mental-health-care-medicare

C2.5 Practice summary — detecting and diagnosing depression in young people

Table C2.3 Checklist — detecting and diagnosing depression in young people

When — When young people have symptoms of depression	
Who — GP; CAMHS; mental health professional	
Initial clinical assessment	
☐ **Engage the young person in assessment** by explaining that it aims for an understanding of his or her situation to guide further actions.	Section C2.1
☐ **Establish the young person's context**, aim for an understanding of his or her strengths and place in the family, school and/or employment and the local environment.	Section C2.1
☐ **Consider use of a tool** (e.g. HEADSS) to provide a framework for psychosocial assessment.	Section C2.1.1
☐ **Look broadly at the young person's situation**, take into consideration other explanations for distress (e.g. grief, conflict, stressful events); developmental, familial and sociocultural context; and evidence from multiple informants (e.g. parents/ carers, teachers).	Section C2.1.1
☐ **Document the assessment**, including major findings, disclosures, family and peer perspectives and changes in symptoms over time.	Section C2.1.3
Assessment of depressive symptoms	
☐ **Conduct a clinical interview** to check for the presence of symptoms consistent with diagnostic criteria for depression (ICD-10 and DSM-IV-TR).	Section C2.2 Appendix 4
☐ **Consider use of a validated assessment tool** to assist in the process of diagnosis. Become expert in administering and interpreting a particular tool or set of measures.	Section C2.2.1
☐ **Exclude other causes of depressive symptoms**, taking into account the possibility of symptoms being caused by undiagnosed physical or mental health conditions or substance use or by a known co-occurring condition.	Section C2.2.2
☐ **Assess the risk of suicide** when depressive symptoms are present. Involve the family and/or other carers in this assessment where possible. If the young person is experiencing suicidal thinking, assist him or her to develop a safety plan.	Section C2.3
Decide on the level and type of support required	
☐ **Tailor approaches to the individual** and the severity of his or her symptoms. Clinical judgement is required in assessing the severity of a depressive episode and in determining the level and type of support appropriate to the individual.	Sections C2.2.2 and C2.4
☐ **Maintain contact** with the young person; he or she may benefit from a continuing therapeutic relationship and talking about symptoms and problems.	Section C3.1

Figure C2.3 Process of assessment for depression in young people



C3 Management of major depressive disorder in young people

For young people not in immediate danger of suicidal behaviour, management of major depressive disorder is likely to include a number of approaches, starting with psychoeducation and supportive management (Section C3.1.1), with the addition of psychological therapy (cognitive behavioural therapy [CBT] or interpersonal psychotherapy [IPT]) (see Section C3.2). Pharmacological treatment (e.g. antidepressant medications) may be warranted in certain situations (see Section C3.3).

This section makes recommendations based on current evidence and gives practical guidance about using psychological and pharmacological treatments to treat major depressive disorder in young people.

C3.1 Developing a management plan

Depressive disorders are often chronic and management may be a long-term process involving several stages (see Table C3.1). The immediate phase of treatment is discussed in Section C2. This section discusses the acute phase of treatment for young people who are not at immediate risk of suicidal behaviour. Continuing management is discussed in Section C4.

Table C3.1 Stages of the management plan

Stage	Aims
Immediate phase	Comprehensive mental health assessment to clarify diagnosis and specific screening for risk of suicide or self-harm to ensure immediate safety (see Sections C2.2–2.4)
Acute phase	Strengthen therapeutic relationship (see Section C1.1) Achieve response and recovery — first a reduction in depressive symptoms, then an absence of significant symptoms for a defined period of time (remission) Monitor risk and progress Minimise impairment
Continuation and maintenance (see Section C4)	Consolidate response and avoid relapse Build relapse prevention skills and supports Monitor progress of young people who have had more severe episodes Prevent recurrence

Throughout management, it is important to:

- keep building the therapeutic relationship — in particular ensure that services are welcoming (see Section C1.1), adopt an honest, empathic and non-judgemental approach (see Section C1.2) and discuss confidentiality (see Section C1.3);
- continue taking a person-centred approach that considers the physical, mental, social, spiritual and cultural aspects of each young person and his or her community (see Section C1.1.2); and
- depending on the young person's age, wishes and circumstances, involve the young person's parents/carers in discussions about the management plan and treatments (see Section C1.4).

During their treatment, young people will be primarily interested in addressing their own goals and improving their quality of life. This key point can undermine the therapeutic relationship and the young person's engagement and adherence to therapeutic tasks. For example, a same-sex attracted youth deciding when to disclose his or her sexuality to parents will not be primarily focused on decreasing scores on a depression checklist. Similarly, a student meeting criteria for depression and struggling to achieve good grades at school may be motivated by educational rather than clinical assistance.

Good practice points

9 Health professionals should provide a good standard of care at all times including maintaining the therapeutic relationship, discussing symptoms and problems, continuing contact, and encouraging a collaborative approach.

10 Health professionals, young people and parents/carers must be aware of the dangers of not treating episodes of moderate to severe depression. Depression is the major risk factor for suicide.

11 Development of the management plan should be person-centred, involving consideration of physical, mental, family, social, spiritual and cultural factors relevant to the young person.

C3.1.1 Initial approaches

For depressive symptoms and mild depression, appropriate initial actions are likely to include continuing care and psychoeducation (information provision and guided self-help, including online interventions or non-directive support). These approaches are also appropriate in managing major depressive disorder, in combination with psychological and/or pharmacological treatments, and are described briefly in Table C3.2. Appendix 6 lists further resources for health professionals and sources of consumer support.

Table C3.2 Initial approaches for managing depressive symptoms

Information and guided self-help	Giving information about depression, the particular type of depression, what causes it and what can help, may assist young people in gaining a sense of coping and competency, and reduce distress and helplessness. It also aids the therapeutic relationship. There are many resources that have been specifically designed for young people, for example: • *beyondblue* youth fact sheets available from the website below or *beyondblue* info line on 1300 22 4636 • websites: Youthbeyondblue (www.youthbeyondblue.com), Reach Out, headspace • online interventions: moodGYM, e-couch
Non-directive support	• Active listening (NHMRC 2004): — asking open-ended questions; — attending to verbal and non-verbal cues; — clarifying the information provided by the young person; and — clarifying his or her understanding of the information provided • Person-centred discussion • Empathy
Lifestyle advice	There is good evidence that relaxation, physical activity (see below), and healthy sleep patterns promote feelings of wellbeing. Appendix 6 lists Australian guidelines on lifestyle issues. Lifestyle advice for the general population will need to be adapted to suit the young person's particular circumstances.

Other non-clinical approaches

There is a lack of evidence to support the use of other physical or psychosocial approaches:

- while many individuals note that their sense of wellbeing is enhanced by physical activity, based on current evidence, physical activity cannot be recommended as an effective treatment for depression in young people (Larun et al 2006 [Cochrane Review]);
- many health professionals include behavioural activation, pleasant event scheduling and physical activity in CBT regimes but such approaches have, as yet, insufficient research evidence to lead to a formal recommendation;
- while bright light therapy may reduce depressive symptoms in young adults with seasonal affective disorder (Spezzano 2006), the prevalence of seasonal affective disorder in Australian young people must be quantified and replication studies undertaken before this therapy can be recommended; and

- physical or psychosocial approaches (e.g. yoga, massage) and/or complementary therapies (e.g. St John's Wort [*Hypericum perfolatum*],[4] S-adenosylmethionine, vitamins, omega-3 fatty acids) are being explored — the evidence for these is limited and generally of poor quality, although many are areas of continuing research (Jorm et al 2006).

C3.1.2 Decision-making about treatments

Current evidence (as summarised in Sections C3.2.1 and C3.3.1) indicates that psychological therapy (specifically CBT and IPT) and pharmacological treatment (specifically fluoxetine) are both effective in treating major depressive disorder in young people.

Unless symptoms are severe, CBT or IPT should be first-line treatment for all young people with major depressive disorder.

When considering treatment options, health professionals need to be aware that a depressive episode may be the first episode of a bipolar disorder, especially if there is a family history of mania.

Table C3.3 provides a summary of responses to a range of diagnoses. However, these are intended as a guide only and increased presenting complexity, such as comorbidity, may require additional actions.

Table C3.3 Key actions in response to diagnosis

Diagnosis	Key actions	By whom
Dysthymia or mild major depressive disorder	Careful monitoring Non-directive support or group CBT/IPT Guided self-help (including lifestyle advice, information provision)	School or community-based care (GPs, paediatricians, mental health professionals) +/- specialist support
Mild to moderate major depressive disorder	Psychological therapy (CBT/IPT) if available Guided self-help (including lifestyle advice, information provision)	Community-based care +/- mental health service
Moderate to severe major depressive disorder	Psychological therapy (CBT/IPT) if available + fluoxetine if necessary	Community-based care + mental health service +/– psychiatrist
Severe major depressive disorder	Psychological therapy (CBT/IPT) if available + fluoxetine to reduce symptoms in short term	Psychiatrist Specialist mental health services
Depression unresponsive to treatment/recurrent depression	Intensive psychological intervention + fluoxetine if necessary	Psychiatrist Specialist mental health services
Depressed phase bipolar	Refer to or consult a specialist in the field for individual advice	Psychiatrist Specialist mental health services
Psychotic depression	Urgent referral to specialist services Consider a more intensive treatment setting Re-evaluation — bipolar	Psychiatrist Specialist mental health services

Source: Adapted from NICE (2005).

4 It should be noted that the Therapeutic Goods Administration advises that people taking SSRIs should not take St John's Wort preparations due to the potential for increased serotonergic effects and adverse effects (TGA 2000).

In general, effective treatment programs can only be devised on the basis of careful ongoing assessment of the nature of the processes underlying the individual young person's problems. Treatments should be selected on the basis of:

- the known benefits and adverse effects of different treatment options (see Sections C3.2–3.4);
- clinical judgement about the most practical and suitable methods, formats and timing of treatments for that individual;
- consideration of the particular needs (e.g. sociocultural and linguistic background), problems (e.g. negative life events, multiple adversities), resources and preferences of the young person and his or her parents or carers; and
- the potential requirement for multiple treatments delivered by different health professionals to treat young people with co-occurring conditions or concurrent symptoms along with the depression.

When considering CBT/IPT or medication, the young person, and parents/carers should be given an outline of:

- the specific treatment modality;
- treatment strengths;
- initial effects (e.g. the potential for focus on symptoms in the early stages of CBT/IPT to increase negative feelings, or for symptoms to worsen in the initial stage of SSRI treatment);
- possible adverse effects and risks;
- likely length of time for effect; and
- elements that are central to treatment success (e.g. sufficient practice of CBT/IPT tasks or adherence to medication).

This discussion aims to ensure that the young person and parents/carers have a clear understanding of the proposed treatment and provides the basis for informed consent.

Good practice points

12 Treatment decisions should be based on the findings of assessments, taking into account the severity of symptoms, response to any previous treatments and co-occurring conditions, as well as the young person's circumstances, preferences and resources.

13 A multidisciplinary team approach is likely to have advantages for individuals with complex presentations.

14 The length of treatment required for effective remission varies. Depressive conditions might require up to 36 weeks of active treatment.

C3.2 Psychological therapies

Psychological therapies aim to alleviate emotional and behavioural symptoms, enhance social functioning (e.g. positive relationships and vocational outcomes) and prevent recurrence of depressive episodes. The main forms of empirically tested psychological therapies for major depressive disorder in young people are cognitive behavioural therapy (CBT) and interpersonal psychotherapy (IPT) or treatments adapted from CBT and IPT. Other commonly used treatments include psychodynamic therapy (including brief dynamic therapy), mindfulness-based therapies (e.g. acceptance and commitment therapy), behavioural therapy, life skills training, family therapy and various forms of group therapy. In practice, many health professionals use a combination of strategies and tailor interventions to individual formulation and needs. Non-directive supportive therapy (i.e. support and active listening) is an essential component of managing depression in young people but has not been shown to be effective on its own (Emslie et al 2005).

3.2.1 Summary of the evidence

Quality of the evidence

The SLR undertaken for these Guidelines identified studies of adolescents that assessed IPT, acute CBT, non-directive and maintenance CBT, systemic-behavioural therapy, non-directive supportive therapy, life skills training, relaxation training, family therapy, therapeutic support group and a social skills group. The evidence for the benefits, harms and cost-effectiveness of psychological therapies in adolescents depends on the therapy studied. No general recommendation about psychological therapies is possible.

There is currently insufficient evidence to support recommendations on family interventions, therapeutic support groups, relaxation training or life skills training in reducing rates of depression or depressive symptoms in adolescents with major depressive disorder. There is limited evidence for psychological therapy in young people on optimal session number, duration of intervention, maintenance and management of inadequate response to treatment. These remain areas for continuing research and are discussed in more detail in Part D.

Studies of young adults included only limited randomised controlled trial evidence comparing CBT with a wait-list condition. There was insufficient evidence to support a recommendation.

Key findings

- Current evidence indicates that CBT is effective in reducing rates of depression (Lewinsohn et al 1990; Clarke et al 1999), reducing depressive symptoms (Lewinsohn et al 1990; Clarke et al 1999; Rossello & Bernal 1999), and improving global and social functioning (Clarke et al 1999; Rossello & Bernal 1999) compared to no intervention. However, there is no significant difference between the effectiveness of CBT and usual care (Clarke et al 2002) or pill placebo (Emslie et al 2006a) in reducing depressive symptoms or improving functioning.
- The limited evidence specific to IPT in adolescents found a benefit immediately post-intervention in increasing remission (Mufson et al 1999), reducing depressive symptoms, and improving (to a small degree) global, social and family functioning (Mufson et al 1999; Rosello & Bernal 1999; Mufson et al 2004a).
- There is insufficient evidence currently to distinguish between CBT and IPT in adolescents.
- There is insufficient evidence on psychological therapies in young adults on which to base a recommendation. Limited randomised controlled trial evidence comparing CBT with a wait-list condition found a benefit of CBT immediately post-intervention in reducing depressive symptoms and in reducing suicidal thinking (Pecheur & Edwards 1984; Eskin et al 2008).
- Studies investigating treatment acceptability of psychological interventions found that overall, acceptability was good during the acute treatment phase but there were high attrition rates in studies with extended follow-up periods (Lewinsohn et al 1990; Clarke et al 1992; Clarke et al 1999; Rossello & Bernal 1999).

The evidence summaries supporting recommendations are given in Appendix 3.

Recommendation 4	Grade
Cognitive behavioural therapy (CBT) or interpersonal psychotherapy (IPT) should be considered as first-line treatment for adolescents with major depressive disorder.	**B**

Good practice point

15 In the absence of more substantial evidence on treating depression in young adults, it is reasonable to extrapolate from the evidence on psychological therapy in adolescents (see Recommendation 4).

3.2.2 Cognitive behavioural therapy

Cognitive therapy is designed to target unhelpful and/or irrational beliefs, attitudes or thoughts, while behavioural therapy is designed to target disabling, unproductive or maladaptive behaviours and enhance skills for optimal social functioning.

CBT aims to change negative thoughts, actions and feelings by using individual or group interventions to teach alternative ways of thinking and acting in response to challenging situations. The goal is to identify and reduce depressive feelings, increase positive experiences and give participants more control over their lives.

Most CBT interventions are (Emslie et al 2005):

- brief and time-limited, encouraging patients to develop independent self-help skills;
- educational, presenting cognitive behavioural techniques as skills to be acquired by practice and carried into the young person's environment; and
- problem-oriented, focusing on identifying thought patterns that contribute to the patient's depression rather than on the origins of their depression.

Techniques used in CBT interventions include cognitive restructuring, instructions and discussion, modelling, role-play, behaviour experiments and behaviour rehearsal.

Skills and knowledge taught in most CBT interventions include psychoeducation, self-monitoring and evaluation, social skills, participating in pleasant activities, relaxation, constructive thinking, self-reinforcement, communication, negotiation and problem solving.

In clinical practice, CBT is typically offered on an individual basis and tailored to the needs of that young person. Most research studies relate to the effects of comprehensive multicomponent programs (e.g. Clarke et al 1995; 1999; 2001; Lewinsohn et al 1990; Garber et al 2009).

CBT for young people differs from adult CBT in several ways (Emslie et al 2005).

- There is greater emphasis on involving parents in CBT for young people, especially for adolescents, because parents generally have an important role in the adolescent's development. Parents may be involved in some CBT sessions, with the young person's consent.
- The cognitive styles of young people and adults differ — young people tend to be more concrete in their thinking and may be more receptive to trying different behaviours than to trying different thoughts.
- Younger members of this age range tend to be more egocentric in their interests and goals — the therapist can use this to gather information (through questions) about the adolescent's thoughts, behaviours, and range of emotions, thereby facilitating treatment.

C3.2.2 Interpersonal psychotherapy

IPT is based on the premise that depression, regardless of symptoms, severity, vulnerability or personality, occurs in an interpersonal context and that depressive symptoms can be lessened and functioning improved through the systematic identification and resolution of relationship and life problems contributing to depression. In young people, such problems might include role disputes with parents or teachers, problems with role transitions such as those required in moving schools or changing jobs, problems with peers and grief arising from loss.

Most IPT interventions (Mufson et al 2004b):

- are individual, brief and time-limited, focusing on strategies within specific problem areas (e.g. role transitions) that will assist the young person to improve his or her relationships and communication with others;
- deal with current (rather than past) interpersonal relationships, focusing on the young person's immediate social context before and during the current depressive episode; and
- aim to foster interpersonal skills that can be adapted to future situations.

Strategies employed in IPT include education; clarification of feelings, expectations and roles; and facilitation of social competence. Techniques include communication analysis, interpersonal problems solving, modelling and role-playing.

IPT-A is a form of IPT for use with adolescents. Adaptations include a focus on the challenges associated with role transitions due to family structural change, the involvement of parents and other family members in various phases of treatment (with the young person's consent) and use of different techniques geared towards adolescents (e.g. rating scales to monitor improvement).

C3.2.4 Suitability of psychological therapies

Psychological therapy is not suitable for all young people. Consideration should be given to the young person's preferences, age, education level, intellectual capacity, language and/or cultural factors and motivation (these will have a variable impact on the young person's suitability to engage in psychological interventions).

Aspects of CBT and IPT that can affect attendance and completion of programs include:

- the time and commitment required to attend sessions and complete homework; and
- the expense of programs, particularly if not subsidised through a mental health plan.

In addition, the effectiveness of the intervention depends on the competence of the therapist. Currently, there are a limited number of therapists trained in CBT and IPT who are also experienced in working with young people (Emslie et al 2005).

Good practice points

16 While CBT and IPT have high acceptability among young people with depression, consideration should be given to the young person's suitability to undertake psychological therapy.

17 CBT and IPT should be provided by professionally trained CBT/IPT therapists who have experience in working with young people. It is important that the therapy is applied in line with evidence-based practice manuals. Continuing maintenance of therapy skills is essential.

C3.3 Pharmacological treatment

In some situations, consideration may be given to trialling antidepressant medication in young people. This section discusses the potential benefits and harms associated with specific medications and includes points for consideration when discussing their use with young people and their families. Caution is required since the efficacy and safety of many antidepressant medications for adolescents and young adults with depression is not established, as discussed below.

C3.3.1 Summary of the evidence

Quality of the evidence

Many clinically relevant questions remain unanswered by current research evidence, including when a health professional should recommend medication, for whom and at what severity of depression, for how long it should be taken, and how best to monitor progress.

Other than for the SSRI fluoxetine, the evidence for the benefits, harms and cost-effectiveness of pharmacological treatments in adolescents and young adults with depression is inconclusive. There have been randomised controlled studies of benefits of pharmacological treatments specific to young people, but most of these have had small sample sizes and very short follow-up periods. The generalisability of the research evidence is unknown, as most studies excluded adolescents with co-occurring conditions such as conduct disorder, alcohol and substance misuse, and adolescents with very high levels of suicidal thinking or behaviour.

Few studies have examined the effect of SSRIs in improving outcomes beyond symptom relief or remission of depression, for example quality of life, and few have outcome data beyond the immediate post-treatment stage. The Treatment for Adolescents with Depression (TAD) Study (March et al 2004) attempted to measure depression-free days, and to develop a quality-adjusted life years (QALY) measure of disease burden, but further research is needed in this area.

Most of the published evidence concerning SSRI use in adolescents relates to fluoxetine. There is currently insufficient evidence on sertraline, citalopram or escitalopram on which to base recommendations.

Very few studies have investigated pharmacological treatment of major depressive disorders specific to the age group 19 to 24 years, and as a result there is insufficient evidence on which to base recommendations.

Concerns about a positive trial outcome publication bias and also the possibility of withheld information of negative trial outcomes make assessment of the published literature more complex. The latter issue recently involved paroxetine; a re-examination including 11 unpublished trials (Barbui et al 2008) reported that paroxetine was not more effective than placebo in adults with moderate to severe depression. Given the uncertainty of the evidence in relation to paroxetine, this antidepressant is included in the discussion but not the evidence summary of these Guidelines.

The SLR also reviewed studies investigating combined therapies and those adding treatments sequentially. It identified good quality RCTs comparing the use in adolescents with major depressive disorder of SSRIs plus CBT with SSRIs alone and CBT plus SSRIs with placebo. Only limited evidence was available on the sequential addition of SSRIs and CBT and on the use of CBT when changing antidepressant medication.

Key findings

Effectiveness of treatments

- Randomised controlled trials (RCTs) comparing SSRIs with placebo in adolescents indicated a benefit of SSRIs over placebo on remission of depression (March et al 2004), global functioning (Keller et al 2001; Berard et al 2006; Donnelly et al 2006; Emslie et al 2006b; Wagner et al 2006a; Mayes et al 2007) and quality of life (Donnelly et al 2006).
- An RCT comparing the effectiveness of CBT plus SSRIs versus CBT alone (March et al 2004) found that the combined therapy was significantly more effective than CBT alone on all measures of effectiveness studied immediately post-treatment. There was, however, no control arm for the CBT and fluoxetine group so conclusions from this are limited.
- One randomised study reported that SSRIs were more effective than tricyclic antidepressants (TCAs) at reducing levels of depressive symptoms in young adults (Joyce et al 2002). This trial also found that the pattern of response for young adults was different from older adults, indicating a need for further subgroup analysis of the young adult population (Mulder et al 2003).
- Controlled trials into the effectiveness of TCAs in adolescents found no effect on remission of depression (Birmaher et al 1998) or functioning (Birmaher et al 1998; Keller et al 2001); a small-to-medium reduction in depressive symptoms compared to placebo (Kutcher et al 1994; Kye et al 1996; Sallee et al 1997; Birmaher et al 1998); no significant difference in functioning compared to SSRIs (Braconnier et al 2003); and a greater likelihood of meeting criteria for depression after 8 weeks of treatment than for fluoxetine (Attari et al 2006). A Cochrane review also suggested that there was marginal evidence to support the use of TCAs in adolescents (Hazell et al 2002).
- Limited evidence on the effectiveness of newer agents in treating major depressive disorder in adolescents found no increased effectiveness of serotonin-norepinephrine reuptake inhibitors (SNRIs) (venlaxafine) (Emslie et al 2007) or reversible inhibitor of monoamine oxidase (RIMA) (e.g. moclobemide) (Avci et al 1999) compared with placebo. No evidence was identified on the treatment of depression in adolescents and young adults using duloxetine, desvenlafaxine, mirtazepine, agomelatine or reboxetine. Further research is required before any conclusions can be drawn about the effectiveness or harms of any of these agents. Their use is currently not recommended in adolescents or young adults.

Adverse effects

- RCT evidence suggests that SSRIs result in higher levels of adverse effects than placebo (Keller et al 2001; Wagner et al 2003; March et al 2004; Berard et al 2006; Donnelly et al 2006; Emslie et al 2006a, 2006b; Kennard et al 2006; von Knorring et al 2006).
- Controlled trials into the effectiveness of TCAs in adolescents found a higher rate of adverse effects than placebo (Keller et al 2001; Braconnier et al 2003; Attari et al 2006).
- Limited evidence on the use of newer agents in adolescents showed higher rates of adverse effects with use of venlafaxine than with placebo (Emslie et al 2007) and no difference in adverse effects between RIMA and placebo (Avci et al 1999).

SSRIs and suicidal thinking

- RCTs (Keller et al 2001; March et al 2004; Berard et al 2006; Donnelly et al 2006; von Knorring et al 2006) and analyses of data on nearly 2,200 children and adolescents taking SSRIs collected by the US Food and Drug Administration (FDA) (Stone & Jones 2006) found a statistically significant increase in suicidal thinking/behaviour. Further exploration of the FDA dataset (Hammad et al 2006) corroborated this association. There were no completed suicides in the study populations.
- The results of the FDA review (Stone & Jones 2006) also show a trend towards antidepressants (SSRIs and new generation antidepressants) increasing the rate of suicidal thinking or behaviour among young adults aged 19 to 24 years.

See Section C3.3.3 for further discussion of suicidal thinking and SSRI medication.

Combined therapies

- Good quality RCT studies (March et al 2004; Emslie et al 2006a; Melvin et al 2006; Herman et al 2007; Domino et al 2008) comparing SSRIs plus CBT with SSRIs alone suggested that the addition of CBT may result in small improvements in functioning and depressive symptoms in the longer term. However, these were rarely large enough to be considered clinically important. SSRI plus CBT treatment was not considered cost-effective compared to SSRI treatment alone in the short term (Byford et al 2007; Domino et al 2008). The benefits seen after 36 weeks of active treatment persisted during 1 year of follow-up on all measures of depression and suicidality (March & Vitiello 2009).
- A large good quality RCT (March et al 2004; Emslie et al 2006a; Kennard et al 2006; Herman et al 2007; Domino et al 2008) comparing CBT plus SSRIs versus placebo found that CBT plus SSRI is superior to placebo for reducing suicidal thinking and depressive symptoms and improving functioning.
- One good quality trial assessed the benefit of adding CBT to usual care, in a population of adolescents who had recently been prescribed SSRI medication for the treatment of a major depressive episode (Clarke et al 2005) and found no significant difference in rates of recovery, depressive symptoms or functioning.
- An average quality study (Kennard et al 2008) assessing the benefit of adding CBT to SSRI treatment in proven responders to fluoxetine reported that sequentially adding CBT to SSRIs in this group may reduce the risk of relapse. However, there was no significant difference in levels of depression and functioning compared to those who received SSRI treatment alone.
- An average quality RCT (Brent et al 2008) found that in non-responders to an SSRI, changing medication (to another SSRI or an SNRI) resulted in better outcomes if CBT was added, although the difference was not always statistically or clinically significant.

The evidence summaries supporting recommendations are given in Appendix 3.

Recommendations 5, 6 and 7	Grade
Prescription of the SSRI fluoxetine should be considered for acute, short-term reduction of depressive symptoms in adolescents with moderate to severe major depressive disorder, where psychological therapy has not been effective, is not available or is refused, or if symptoms are severe.	**B**
CBT may be added to/continued with SSRI therapy, to reduce the risk of suicidal thinking and improve functioning in adolescents with major depressive disorder.	**B**
Tricyclic antidepressants should not be used for treating major depressive disorder in adolescents.	**B**

Good practice points

18 In the absence of more substantial evidence on treating depression in young adults, it is reasonable to extrapolate from the evidence on pharmacological treatment in adolescents (see Recommendations 5, 6 and 7).

19 SSRIs are not recommended for treating adolescents or young adults with mild depression.

C3.3.2 Determining whether pharmacological treatment is warranted

Decision-making about pharmacological treatment is on a case-by-case basis, taking into account a range of considerations including severity of symptoms, the success of previous treatments and presence of psychosocial stressors, as outlined in Table C3.4.

Table C3.4 Considerations when deciding whether to recommend pharmacological treatment

Severity
• Does the severity of the young person's depression warrant pharmacological treatment and outweigh the risk of adverse events?
Patient's previous treatments
• Has the young person taken medication previously for depression? • Did the young person receive an adequate dose of medication for an appropriate period of time? • What was the response to treatment? Was the medication tolerated? • Did the young person adhere to his/her medication regime? If not, why not?
Other family members' responses
• Do parents/carers or other people of influence support the use of medication?
Recurrent depression
• Is depression recurrent despite an adequate psychological intervention? • In previous episodes, did the young person receive medication and did he/she find it beneficial? • If medications have been used previously, did the young person experience adverse effects, including manic switch?
Response to psychotherapy
• If psychological therapy has not been tried and the severity of depression is not such that it warrants immediate medication, a trial of a specific psychological therapy (CBT or IPT) should be considered. • If psychological therapy has been tried, was adequate time and effort given to produce results? Was the therapy specific (e.g. CBT/IPT or non-directed) and provided by a health professional with expertise in these approaches?
Convenience and affordability for young person or family
• Does the young person (if independent) or the family have financial means to obtain medications? • Is psychological therapy unavailable or inconvenient due to the amount of time required?
Psychosocial stressors
• Are there external psychosocial stressors that maintain the depressive disorder? Can these be modified with clinical benefit prior to a trial of medication?

Source: Adapted from Emslie et al 2005.

Health authority recommendations

Different countries have adopted different regulatory responses to findings on the safety and efficacy of antidepressants in children and young people.

- UK health authorities have advised doctors to avoid SSRIs for the treatment of depression in children and young people, except fluoxetine.
- US health authorities have recommended that for individuals up to 24 years of age 'black-box' warnings about the increased risk of suicidality be included on medication prescribing and patient information leaflets.

In Australia, the Adverse Drug Reactions Advisory Committee (ADRAC) has issued a statement noting that while SSRIs are commonly prescribed for young people with depression, none has been approved for this purpose in Australia (although fluoxetine, fluvoxamine and sertraline have been approved for treating obsessive-compulsive disorder in this age group).

ADRAC has also advised that prescribers in Australia should note that the marketers of SSRIs warn, or caution against the use of SSRIs for depression in people aged less than 18 years.

While not preventing their use, ADRAC advised that the use of SSRIs in young people should only occur in the context of a comprehensive management plan for the patient, which includes careful monitoring for the development of suicidal thinking or behaviours. ADRAC also noted that patients already being treated with an SSRI should not have their medication ceased abruptly.

Good practice point

20 Prescription of an SSRI must occur within the context of an ongoing therapeutic relationship and management plan.

C3.3.3 Supporting informed decision-making

If pharmacological treatment is considered warranted, it is important to explain the rationale behind this to the young person and his or her parents/carers. Further information to assist them in making a decision about whether to begin treatment and what to expect includes discussion of:

- the range of possible adverse effects and their likely duration;
- the possibility of emergence or escalation of suicidal thinking;
- the need for ongoing monitoring while the medication is being used; and
- the effects of drug interactions (including with street drugs [e.g. potential interaction with ecstasy], alcohol and over-the-counter medications).

Effective communication of health risks, including providing appropriate written material, is important in enabling young people and their families to make informed treatment decisions. Discussing possible adverse effects must always occur as part of an informed consent process. Providing adverse effect fact sheets is best practice, as this information will help to reduce anxiety should an adverse effect occur. Part of this discussion should include the information that adverse effects are often mild and self-limiting or, if troublesome, will resolve on cessation of the medication.

Research suggests that the perception of adverse effects is influential in many patients' decisions about taking medication (Knapp et al 2004). The way information is presented can have significant effects on decisions made. Presenting the relative frequency of occurrence of an event (rather than or in addition to percentages) might lead to more accurate risk perception and better decisions (Timmermans et al 2008) — for example, explaining that 10% means that '10 out of every 100 patients that I prescribe this medication for' will experience a particular adverse effect.

Good practice point

21 To enable informed consent to pharmacological treatment, young people must be given information on adverse effects (including the possibility of emergence or escalation of suicidal thinking) and the need for ongoing monitoring during treatment.

Adverse effects

In studies investigating adverse effects of SSRIs in adolescents, the most common adverse effect reported was somnolence (drowsiness or strong desire for sleep). A very wide range of adverse effects has been identified. Those found to occur at twice the rate in the intervention group than in the placebo group in RCTs include the following, although it should be noted that the base rate is very low:

- fluoxetine (10–40 mg/day) — mania/hypomania, irritable/depressed mood, anxiety/panic, sleep, fatigue/sedation (Emslie et al 2006a; Kennard et al 2006);

- paroxetine* (10–50 mg/day) — decreased appetite, nausea, vomiting, agitation, tachycardia, tremor, depression, hostility, insomnia, somnolence, dyspepsia, respiratory disorder, pharyngitis, fever, increased cough, dizziness, otitis media, tooth disorder, sweating, contact dermatitis (Berard et al 2006; Emslie et al 2006b; Keller et al 2001);
- citalopram (10–40 mg/day) — fatigue (von Knorring et al 2006); and
- sertraline (25–200 mg/day) — vomiting, diarrhoea (Wagner et al 2003; Donnelly et al 2006).

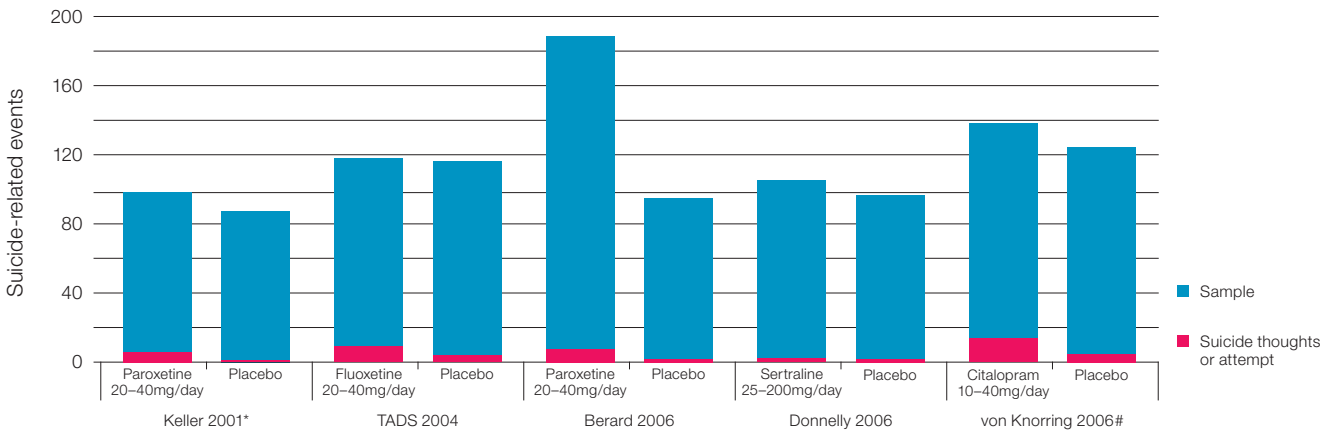
Sexual dysfunction (erectile dysfunction, delayed ejaculation, anorgasmia) is a frequently reported SSRI adverse effect and can cause significant distress to young people.

Increased suicidal thinking and behaviour

While there is an association between use of SSRIs and increased suicidality, the rates of suicidal thinking or attempts are low in both placebo and treatment groups:

- *adolescents* — reported rates of suicidal thinking or attempts associated with SSRI use ranged from 1.9% to 11.3% in SSRI conditions, and 1.1% to 4.2% in placebo conditions, depending on the drug used and the severity of symptoms in the study population (see Figure C3.1); no completed suicides were recorded; and
- *young adults* — absolute rates of suicidal thinking or behaviour were very low (0.63% for antidepressant conditions vs 0.50% in placebo conditions) and the rates for suicidal acts even lower (0.03 vs 0.04% for preparatory acts, 0.55% vs 0.27% for suicide attempts and 0.03% vs 0% for completed suicides)(Stone & Jones 2006).

Figure C3.1 Summary of studies reporting on suicidal thinking or attempts over treatment period



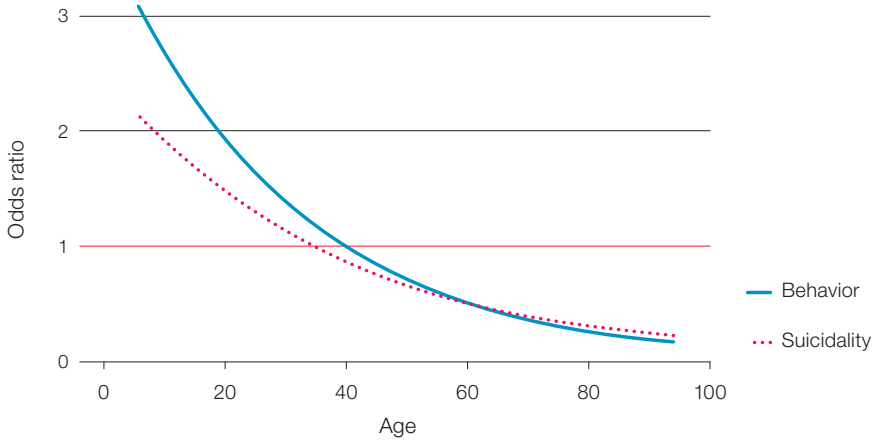
Notes: * suicidal thinking/gestures; #suicidal thinking.

The mechanism linking antidepressant treatment to the risk of suicidality is unknown, but based on high quality evidence (Stone & Jones 2006), appears to be age-related. In those aged between 25 and 64 years, there appears to be no net effect on suicidal behaviour but possibly a protective effect for suicidality, while in adults aged 65 years and older SSRIs appear to reduce the risk of both suicidal thinking and behaviour.

Figure C3.2, where an odds ratio of 2 indicates a doubling of likelihood, shows that antidepressant medication is associated with increased suicidal thinking and behaviour in adolescents and young adults and decreased suicidal thinking and behaviour in older adults.

* Note that paroxetine, for the reasons given on page 53, is not a recommended antidepressant for adolescents or young adults.

Figure C3.2 Odds ratios for suicidality and suicidal behaviour for active drug relative to placebo by age



Source: Stone & Jones 2006.

It should be noted that, particularly for moderate to severe depression, concerns about the risk of increased suicidal thinking with SSRIs must be balanced against the risks of non-treatment. Most suicide attempts occur in the month prior to contact with health services. As well, data from observational studies indicate that young people who were not prescribed SSRIs were more likely to attempt suicide (Valuck et al 2004; Simon 2006). Observational studies have also found decreased suicidal thinking and behaviour with increased duration of antidepressant use (Simon 2006). This is consistent with the FDA data reporting no completed suicides in treatment study samples. However, given that some treatment studies exclude participants with recent suicidal thinking and behaviour, current data does not exclude a relationship between SSRIs and completed suicide in a subset of adolescents and young adults. Further research is required.

As discussed in Section C3.3.1, preliminary evidence from the TAD Study indicates that emergent suicidal thinking can be ameliorated in therapy; the SSRI (fluoxetine) treatment group had twice the rate of clinically significant suicidal thinking than the CBT alone group or the SSRI + CBT combined therapy group. The authors conclude that the addition of CBT conferred a protective effect (March & Vitiello 2009), which remained after 1 year of follow-up (March & Vitiello 2009). While needing replication, this is an important point for clinical practice.

C3.3.4 Initiating SSRIs and monitoring

Prescribing an antidepressant

If a collaborative decision is taken to begin use of antidepressants in a young person, the available evidence supports the short-term use of the SSRI fluoxetine (see Section C3.3.1). Other pharmacological treatments such as TCAs and newer agents are not recommended. The medication regime should begin at the lowest possible indicated dose. Treatment duration is discussed in Section C4.2.1.

Before treatment commences, the following should be discussed with the young person and his or her parents/carers:

- the delay in onset of therapeutic effect (up to 4 weeks) and the potential for SSRIs to make some symptoms (e.g. sleep difficulties) worse initially;
- the time course of treatment and how to take the medication as prescribed;
- the need for close observation and regular communication with the treating health professional;
- the possibility of mild, self-limiting side effects such as nausea and headaches;
- the need to seek medical advice and evaluation promptly if the young person experiences nervousness, agitation, irritability, mood instability, or sleeplessness that either emerges or worsens during treatment with SSRI medications; and
- the importance of continuing to have psychological therapy.

Information should also be provided on when to seek medical advice and instructions for urgent contact in the event of self-harm, suicidal thinking, or suicidal behaviour should be provided.

Good practice point

22 Pharmacological treatments need to be prescribed by those trained to do so, who are very familiar with the range of adverse effects and able to appropriately monitor the young person. Where necessary, expert advice should be sought before prescribing, or the young person should be referred to a mental health service or psychiatrist.

Monitoring for adverse effects, suicidal thinking and behaviour

The available evidence on suicidal thinking and actions associated with SSRI use (see Section C3.3.3), and the possible impact of adverse effects on adherence, have significant clinical implications for young people being treated with SSRIs and highlights the need for their close monitoring. Monitoring is also important given that review of symptom severity and degree of impairment are ongoing processes. For example, the worst point of a young person's depression may be after the initial assessment, before any appreciable treatment gains. Knowledge of a deteriorating mental state is crucial in planning appropriate interventions. Monitoring for symptoms of mania is also essential; if the depressive episode is the first presentation of a bipolar disorder, initiation of an SSRI can precipitate mania. Where young people experiencing a depressive episode have a previous history of mania or mixed presentations, consideration may be given to prescribing a mood stabiliser.

Recommendation 8	Grade
Young people should be monitored for the onset of or increase in suicidal thinking following initiation of SSRIs.	B

Good practice points

23 Close monitoring of symptom severity and adverse effects is required for young people taking an SSRI, especially during the first 4 weeks.

24 A protocol for managing suicidal thinking must be in place for every young person aged less than 25 years who is taking SSRIs to treat major depressive disorder, including baseline assessment and regular monitoring for suicidal thinking.

25 Health professionals should be aware of the risk that a manic episode may be precipitated following initiation of SSRIs. For young people with depressive episodes and a history of mania or mixed presentations, a mood stabiliser may be required.

Process of monitoring

Planning for monitoring should be undertaken in collaboration with the young person and his or her parents/carers and other health professionals involved in care. Monitoring is primarily the responsibility of the prescribing doctor. However, monitoring is more effective if it includes multiple sources such as family and friends and professionals such as teachers, therapists and school and clinical psychologists.

Key time points for monitoring are:

- *before beginning treatment (baseline assessment)* — monitoring of symptoms that might be subsequently interpreted as adverse effects for 7 days before prescribing (unless medication needs to be started immediately);
- *within 7 days of beginning treatment* — careful monitoring of emergent adverse effects, as well as review of mental state, general progress and any change in suicidal thinking; and
- *every week for 4 weeks* — monitoring for clinical worsening, suicidal thinking or behaviour, or unusual changes in behaviour such as sleeplessness, agitation, withdrawal from normal social situations, or manic or psychotic symptoms.

Timing of ongoing assessments should be decided on an individual basis, and recorded in the notes.

Young people taking SSRIs who may benefit from particularly close monitoring, including those who:

- *decline psychological therapy* — as CBT added to SSRI treatment may reduce suicidal thinking, the need for regular close monitoring should be reinforced to the young person; and

- *have existing suicidal thinking or behaviour* — as most studies have excluded adolescents with depression who already have suicidal behaviour or thinking or who are deemed to be at high risk, there is insufficient evidence to draw conclusions about the effect of SSRIs in this group — good practice suggests that these people should be monitored even more closely if taking SSRIs.

Table C3.6 can be used to guide monitoring of young people using SSRIs.

Discontinuing medication

Medication should be discontinued immediately if there is a sudden or unexpected increase in suicidal thinking over the first 7–10 days after initiating treatment or increasing the dose.

Following a successful treatment and continuing treatment for a further 6 months (see Section C4.2.1), a slow discontinuation of 2–12 weeks is recommended, depending on the clinical circumstances.

A 'discontinuation syndrome' (Haddad & Anderson 2007) can occur with cessation of any SSRI but is least likely with fluoxetine due to its long elimination half-life. Health professionals should warn patients about the possibility of discontinuation symptoms and taper the SSRI. Discontinuation symptoms characteristically have an abrupt onset (within days of stopping the SSRI). Most are mild, short-lived and can be managed with monitoring alone. Common symptoms include dizziness, headache, nausea and lethargy. Rarely, extra-pyramidal syndromes, mania or hypomania can occur. More severe symptoms should be treated symptomatically or the SSRI should be re-commenced and tapered more slowly.

C3.4 Practice summary — managing major depressive disorder in young people

Table C3.5 Checklist — managing major depressive disorder in young people

When — Following diagnosis of major depressive disorder	
Who — GP; CAMHS; mental health professional	
Providing appropriate care	
☐ **Keep building the therapeutic relationship**, in particular ensuring that services are welcoming and adopting an honest, empathic and non-judgemental approach.	Section C1.2
☐ **Involve the young person and parents/carers** in the development of the management plan and decision-making about treatments.	Section C1.4
☐ **Provide a good standard of care at all times** by continuing contact, discussing symptoms and problems and encouraging a collaborative approach.	Section C3.1
Developing the management plan	
☐ **Provide support and lifestyle advice** to young people experiencing depressive symptoms as initial approaches to support management.	Section C3.1.1
☐ **Provide appropriate information** to support decision-making and informed consent about treatments.	Sections C3.1.2; C3.2.4
☐ **Base treatment decisions** on information gathered during the assessment process, the preferences of the young person and his or her parents/carers and the recommendations and good practice points outlined in these Guidelines.	Section C3.1.2
Psychological therapies	
☐ **Consider suitability** of the selected therapy for the individual young person taking into consideration his or her preferences, age, education level, intellectual capacity, language and/or cultural factors and motivation.	Section C3.2.4
☐ **Discuss the parameters of the chosen therapy** (e.g. number of sessions, homework, costs) with the young person and his or her parents/carers.	Section C3.2
☐ **Monitor adherence** to therapy tasks and enhance therapy adherence.	
☐ **Adapt/review** therapy if the young person is unresponsive.	
Pharmacological treatment	
☐ **Consider whether pharmacological treatment is warranted** in young people experiencing moderate to severe major depressive disorder if they are unresponsive to or decline psychological therapy or if this is unavailable, or if symptoms are severe. Take into account the young person's preferences, the risk of adverse effects, response to previous treatments, convenience and psychosocial stressors that may maintain the depression.	Section C3.3.2
☐ **Support informed decision-making** about pharmacological treatment by providing appropriate information on adverse effects, the possibility of the emergence or escalation of suicidal thinking and the need for ongoing monitoring.	Section C3.3.3
☐ **Collaborate** with the young person and parents/carers and other health professionals to maintain monitoring that is clinically guided and ensures the safety of the young person.	Section C3.3.4

Table C3.6 Practice algorithm for use of SSRIs by young people

If: young person experiencing severe symptoms, or has moderate to severe depression and is unresponsive to psychological therapy

Step 1 — Assessment (see Section C2)

- Review diagnosis
- Ensure all relevant factors including co-occurring conditions, family and social environment, cultural and at-risk population factors and possible bipolar disorder have been considered

↓

If: pharmacological treatment is warranted (see Table C3.4)

Step 2 — Discussion and information provision (see Section C3.3.3)

- Discuss the rationale for the medication, the delay in onset of effect, the time course of treatment, the possible adverse effects (including emergence or escalation of suicidal thinking), and the need to take medication as prescribed
- Recommend continuation of psychological therapy
- Advise parents/carers of the need for close observation and regular communication with the treating health professional
- Advise the young person and parents/carers to seek medical advice and evaluation promptly if the young person experiences nervousness, agitation, irritability, mood instability, or sleeplessness that either emerges or worsens during treatment with SSRI medication
- Give instructions for urgent contact with the prescribing doctor or other pre-arranged contact point(s) in the event of self-harm, or suicidal thinking or behaviour

↓

Step 3 — Baseline assessment

- Monitor symptoms that might be subsequently interpreted as adverse effects for 7 days before prescribing (unless medication needs to be started immediately)
- Agree on a monitoring protocol if young person has psychological therapy with another health professional
- If young person declines psychological therapy, reinforce the need for regular close monitoring of progress by the prescribing doctor
- Medication regime begins at the lowest possible indicated dose

↓

Step 4 — Initial monitoring — within 7 days

- Monitor for emergent adverse effects as well as agitation, suicidal thinking and behaviour and manic symptoms; review mental state, general progress and any change in suicidal thinking or behaviour

↓

Step 5 — Regular review — every week for 4 weeks

- Observe patients closely for clinical worsening, suicidal thinking, or unusual changes in behaviour such as sleeplessness, agitation, or withdrawal from normal social situations; watch for symptoms of mania or psychosis

↓

Step 6 — Monitoring and relapse prevention

- Continue to assess regularly — the precise frequency will need to be decided on an individual basis, and recorded in the notes

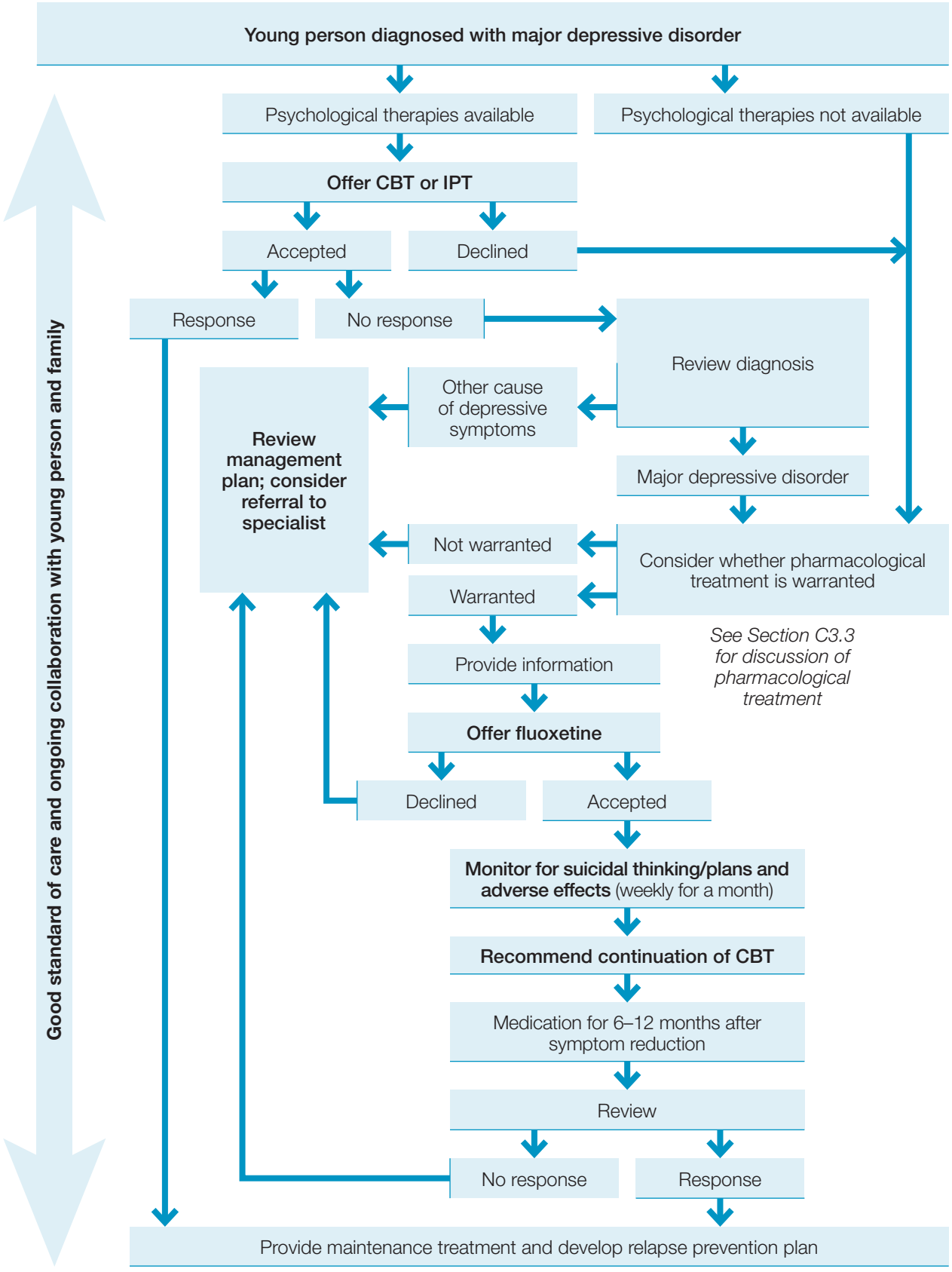
↓

Step 7 — Discontinuation

- The medication should be discontinued immediately if there is a sudden or unexpected increase in suicidal thinking over the first 7–10 days after initiating treatment or increasing the dose
- Following a successful treatment and continuing treatment for a further 6 months (see Section C4.2.1), a slow discontinuation of 2–12 weeks is recommended, depending on the clinical circumstances
- During discontinuation, monitor for relapse of depressive symptoms and discontinuation syndrome

Figure C3.3 Algorithm for managing major depressive disorder in young people

The following diagram represents some general principles for managing major depressive disorder in young people. Individual care pathways will be informed by clinical judgement and will need to be adapted to the local setting. For more complex cases, case management may involve a range of health professionals providing aspects of care for which they have the appropriate expertise.



C4 Continuing treatment

Once a young person is established on a program of treatment, continuing monitoring and review is required to identify response to treatment and early signs of relapse (re-emergence of the treated depressive episode), limit any illness-related impairment, attempt to prevent recurrence (onset of a second or subsequent depressive episode), and assist the young person to return to pre-illness levels of functioning.

While rates of relapse and recurrence in young people are not clear, longitudinal studies of both clinical and community samples of depressed youths indicate that the probability of recurrence is around 30% to 70%, depending on the presence of risk factors such as family history and negative life events, and whether there are co-occurring conditions (Birmaher et al 2002; Costello et al 2002).

Non-responsiveness to treatment, continuation or maintenance treatment and prognosis are areas that urgently require further research (see Part D and Table D2). The following discussion is based on an SLR that led to no recommendations, and good practice points that often rely on one or two average quality studies. Nevertheless, these are areas where guidance is requested. While further research is being undertaken, health professionals and consumers should be cautious about definitive statements on these areas of clinical practice.

C4.1 Inadequate treatment response

Initial therapy fails in up to 40% of young people with major depressive disorder, for both psychological and pharmacological interventions. Severe depression, family conflict and increased functional impairment are associated with inadequate response to treatment (Emslie et al 2005). The interactive effects of co-occurring conditions on functioning and the long-term course of depressive disorders are unclear, but these may complicate treatment outcomes by making it more difficult to achieve recovery in the short term (Mufson et al 2004a).

Before changing the treatment plan of a young person whose depression appears not to respond to treatment, an adequate trial of the initial therapy (single or combined) should be completed. While there is limited evidence for optimum CBT/IPT session number, SSRI dosage regimes and optimal duration for treating young people, general guidance based on good clinical practice can be given. Non-response after 6–10 sessions of individual or group CBT/IPT and/or 8 weeks of fluoxetine (up to a maximum dose of 40 mg/day), indicates that the following factors should be reviewed:

- the diagnosis (incorrect diagnosis is a common cause of non-response to treatment);
- other factors crucial to any therapy, such as the quality of the therapeutic relationship, the extent to which treatment goals are shared, and the young person's motivation to change;
- adherence to the treatment — for pharmacological treatment, this involves assessing the young person's medication regime, while for psychological therapy, the health professional should review the young person's adherence to the therapy, and also how closely the current therapy conforms with the therapy the health professional was trained to undertake; and
- previously unrecognised co-occurring mental health disorders (e.g. substance use disorder) or medical conditions, and any adverse circumstances (e.g. negative life events, ongoing interpersonal conflict, family dysfunction), which are common barriers to progress of treatment.

If these factors are not responsible for the non-response and an alternative therapy is required, changing to the new therapy should be undertaken carefully, after full discussion with the young person and others involved in his or her care.

Specialist advice should be sought before tailoring the dose of fluoxetine above 40 mg/day, or switching to another medication. Switching generally involves gradual reduction of the dose of one medication and a washout period before commencing the next medication. Given the number of antidepressant medications in current use, health professionals are advised to consult the medication product information and individualise medication reduction and/or switching based on the medication currently being used and the proposed new antidepressant.

There is no current research on which to base an evidence-based recommendation for addition of a second antidepressant or augmentation with a mood stabiliser when treating young people with non-responsive and/or chronic depression. Current expert opinion varies concerning prescription of second-line antidepressants following inadequate response to fluoxetine. Possibilities include a second SSRI with an acceptable adverse-effect profile (e.g. sertraline or citalopram); change to a newer antidepressant agent such as mirtazepine; or augmentation with a mood stabiliser. Given the lack of evidence for switching strategies, GPs are advised to establish good collaborative relationships with local specialists with expertise in the adolescent and youth mental health fields, and if needed, work through second-line psychopharamaceutical options in a measured and controlled trial of treatment.

Good practice point

26 If a young person does not respond to an adequate treatment dose (psychological therapy and/or pharmacological treatment) after an appropriate period of time, the diagnosis should be reviewed and consideration given to co-occurring conditions, drug or alcohol misuse or ongoing adverse circumstances.

C4.2 Continuation and maintenance treatment

In young people in whom acute treatment goals are being met, the goal of continuation treatment is to consolidate the gains achieved during the acute phase and prevent relapse (the return of depressive symptoms) and functional impairment that is related to the depressive disorder. Longer term maintenance treatment aims to secure the remission of symptoms, reduce the risk of recurrence, maintain functioning and counter impairment, and lessen the severity of subsequent episodes.

C4.2.1 Optimal treatment duration

Psychological therapy

Most CBT and IPT programs range from 10 to 16 sessions; it would be difficult to cover the key elements in CBT content in less time than this. The number of sessions required is also likely to vary according to the severity of depression, its duration and whether there are co-occurring conditions.

From a clinical point of view it is helpful for the health professional to monitor depression symptoms on a weekly basis to determine whether further sessions are required.

Pharmacological treatment

No studies on early warning signs or relapse prevention for major depressive disorder in young people were identified in the SLR or in the NICE guidelines (2005). However, the limited evidence available on young people and extrapolation from research on adult populations suggest that active treatment should be continued for 6 months post-remission:

- in a small, randomised study, adolescents with major depressive disorder continued their current dose of fluoxetine or placebo after remission; at 24 weeks, significantly fewer patients on maintenance fluoxetine had relapsed when measured on the Clinical Global Impressions Scale (Emslie et al 2008); and
- in the TAD Study, while 23% of participants achieved remission in the acute phase, this improved to 60% after 36 weeks of treatment (March & Vitiello 2009); in addition, the benefits of the longer treatment persisted over 1 year of naturalistic follow-up (March & Vitiello 2009).

This is consistent with earlier advice that recommended continuation of active therapy for 4–6 months post-remission, to consolidate remission of symptoms and to prevent relapse (Emslie et al 2005). It is also consistent with guidelines for adults, which are based on randomised maintenance therapy trials (e.g. Reimherr et al 1998).

Good practice point

27 While there is a small evidence base, current good clinical practice suggests continuing medication therapy for 6 months post-remission.

Combined therapy

Evidence from the TAD Study suggests that combined therapy provides the most effective care in the longer term. The combined fluoxetine plus CBT arm of the trial provided statistically greater improvement at 12 and 18 weeks of therapy than placebo (March & Vitiello 2009) while all treatment arms of the study (thus including CBT alone) were equally effective at 36 weeks. There were two specific benefits with CBT; patients having CBT were more likely to sustain previous positive outcomes (Rohde et al 2008) and any therapy with CBT (CBT alone or combined therapy) did not demonstrate the emergence of suicidal thinking seen in the fluoxetine only group (March & Vitiello 2009).

Good practice point

28 Where SSRI medication is warranted, a combined SSRI plus CBT/IPT approach appears to provide the most effective care. If a moderate to severe depressive disorder fails to respond to combined therapy, specialist advice or a second opinion should be sought.

C4.2.2 Discontinuing therapy

Whether pharmacological or psychological, discontinuing therapy depends on consideration of a range of factors that may contribute to relapse and recurrence, including psychosocial stressors, the individual situation (e.g. school year or workload) and the presence of chronic and/or recurrent depression.

Practical guidance on discontinuing antidepressant medication is given in Section C3.3.4.

Good practice point

29 If discontinuation of treatment is planned, consideration needs to be given to factors that may contribute to relapse and recurrence.

C4.2.3 Maintenance treatment

While maintenance treatment in adults may involve continuing pharmacological treatment, this is usually not appropriate in young people, as major depressive disorder may not continue to be a problem in adulthood (Emslie et al 2005).

The goals of maintenance treatment are to identify signs of relapse, promote functioning, address illness-related impairment and assist the young person to return to his or her previous, pre-illness level of functioning. Table C4.1 outlines advice on strategies for relapse prevention that may be useful for young people

Maintenance therapy for bipolar disorder is discussed in Section C5.

Table C4.1 Relapse prevention strategies for young people

Learn about depression and the effective use of treatments
Monitor mood changes and identify personal warning signs (e.g. sleep changes, feelings of hopelessness)
Identify activities that have a positive impact on mood (e.g. listening to music, visiting friends) and include these as routine activities
Follow the management plan, even when mood starts to improve — for example, take medication for the period advised by the doctor and keep attending psychological therapy sessions
Follow a healthy lifestyle, including exercise, proper nutrition and good sleep habits
Try a range of strategies for coping with stress
Maintain contact with friends and family and try to avoid spending too much time alone

C4.3 Factors influencing prognosis

Several factors are associated with improved prognosis in young people with depression, including younger age, lower severity of depressive symptoms, higher family functioning, and fewer co-occurring conditions. However, few studies have consistently demonstrated predictors of relapse and recurrence (Emslie et al 2005).

The SLR undertaken for the Guidelines investigated how biopsychosocial risk factors and protective factors have an impact upon the course of depression and outcomes in adolescents and young adults, and found the following Grade A or B evidence.

- Recurrence of depressive disorder in adolescence and young adulthood is more likely in females than males, although there is some inconsistency on the statistical significance of this relationship (Lewinsohn et al 2000; Dunn & Goodyer 2006; Pettit et al 2006) (Grade B).
- Young people with depressive disorders have better prognostic outcomes if they have had fewer previous depressive episodes, have a minor depressive disorder rather than major depressive disorder, have a shorter depressive episode and have lower severity of depressive symptoms (Lewinsohn et al 2000; Park et al 2005; Pettit et al 2006; Karlsson et al 2008) (Grade B).
- The presence of intellectual disability, as part of an Axis II diagnosis, in current or formerly depressed adolescents, increases the risk for recurrent major depressive disorder (Karlsson et al 2008) (Grade B).
- The presence of personality disorders or a high level of borderline or antisocial personality disorder symptoms in current or formerly depressed adolescents increases the risk for recurrent major depressive disorder (Lewinsohn et al 2000) (Grade B).

Evidence from single studies also suggests that:

- adolescents with a current depressive disorder and little or no psychosocial impairment have a shorter time to recovery compared to those with moderate to high psychosocial impairment (Karlsson et al 2008);
- adolescents with major depressive disorder who devalue themselves or have a negative self-view are slightly more likely to have persistent depression than those with a more positive self-image (Park et al 2005);
- adolescents with a past depressive episode and co-occurring substance use disorder are more likely to have a major depressive disorder in young adulthood than those without a co-occurring substance use disorder (Lewinsohn et al 2000);
- formerly depressed adolescents without a family history of recurrent depressive disorder are more likely to stay well in adolescence and young adulthood, compared to those with a family history of recurrent depressive disorder (Lewinsohn et al 2000); and
- in adolescents receiving CBT, remission over the course of treatment is more likely in those of younger current age with better social functioning; depressive symptoms are likely to reduce to a greater degree in those with low baseline levels of symptoms, with parent involvement, and a younger age of onset (Clarke et al 1992; Jayson et al 1998).

C4.4 Managing young people with severe or recurrent depression and/or co-occurring conditions

C4.4.1 Managing co-occurring conditions

Many treatment studies exclude participation by individuals with co-occurring mental health conditions. Unfortunately, this means that there is less evidence on which to base treatment decisions for individuals with complex presentations.

A more sophisticated management plan is needed for complex presentations (e.g. a young person with depression and an eating disorder, or a young person in foster care who appears depressed but also has post-traumatic symptoms such as intrusive trauma memories).

Approaches may include prioritising which disorder (or symptoms) to treat first. Practices vary, for example treating less challenging symptoms first so that the individual has some experience of early therapy success, or treating the symptoms that cause the most impairment.

In complex presentations, a longer assessment phase and accessing information from multiple informants across a longer developmental period can clarify the young person's course and ultimately the diagnosis. There may be a role for a brief (4–7 day) inpatient admission to assist this process, especially to determine the consistency and stability of the young person's depressed mood and his or her interpersonal functioning (see Section C4.4.3).

Multiple interventions delivered by different health professionals and/or services may be required. Clinical judgement will be needed to select the most practical and suitable methods, format and timing for each individual, with collaboration between health professionals to ensure provision of integrated, continuous care. For example, a range of professionals from different services may be needed to assist a young person with co-occurring depression and substance use disorder. As well as exacerbating symptoms of depression, increasing suicide attempts, compromising adherence to treatment regimes and/or reducing the effectiveness of prescribed medication, substance use disorder puts young people at risk of psychosocial problems such as homelessness, family disruption, and financial and legal problems.

Overall case management by one health professional is advisable, especially as the case complexity increases. Case managers of younger adolescents will benefit from familiarity with other service systems such as education, care and protection agencies and the justice system.

Good practice point

30 Complex presentations may require a longer assessment phase and multiple interventions delivered by different health professionals. Overall case management by one health professional is advisable.

C4.4.2 Physical therapies

Electroconvulsive therapy (ECT)

Health professionals considering ECT for young people with severe depression should seek a second opinion from a mental health specialist experienced in the treatment of depressive disorders including the use of ECT. Health professionals should also be knowledgeable about the usual indications, contraindications and adverse effects of this therapy.

The SLR did not identify any randomised controlled trials of ECT versus sham ECT or any active treatment; nor did a recent review (Birmaher & Rey 2009). One retrospective cohort study compared six sessions of bilateral, brief pulse ECT with usual pharmacological care — post-treatment, the ECT group had fewer depressive symptoms, although this group had lower symptoms at baseline. There was a significant reduction in duration of hospitalisation in the ECT group.

There is no current (as of December 2009) Cochrane review of ECT for major depression in either adults or children and adolescents. Based on case series data, one review suggested that ECT is effective in treating depressed adolescents (Rey & Walter 1997). A subsequent review (Walter & Rey 2003) reported continued use of ECT in New South Wales, the rate being 1.53/100,000 adolescents treated with ECT per year.

Both the NICE guidelines (2005) and the AACAP (2007) advise consideration of ECT for adolescents with severe depression who are non-responsive to other treatments. The depression medication algorithm of Emslie et al (2005) places ECT as the last option.

Good practice point

31 Electroconvulsive therapy (ECT) may be considered in rare cases, such as treating severe depression with psychotic features where other approaches have not been successful.

Transcranial magnetic stimulation (TMS)

The SLR found no randomised controlled trial of TMS. While there are published meta-analyses of TMS in adults experiencing major mood disorders, the adolescent literature only includes single case studies and small case series. There is enough evidence from this data to suggest TMS be studied with more rigorous methodologies in young people with depressive disorders. Currently, TMS cannot be considered to be a routine treatment of depression in young people.

C4.4.3 Inpatient care

Community care is preferable for young people with depressive disorders. However, inpatient care may be beneficial in some situations. If possible it is preferable to anticipate the need for admission before the situation reaches the stage of being a crisis. However, both planned and crisis admissions have a role in care.

- *Planned admissions* — can be useful for establishing or revisiting the diagnosis, clarification of co-occurring conditions, psychosocial stressors and review of any lack of progress including lack of symptom reduction and/or persistent depression-related impairment.
- *Crisis admissions* — may be required when an acute phase of moderate to severe depressive disorder is experienced, there is a high risk of intentional self-harm or harm has occurred.

Planned admissions allow for:

- multiple investigations (e.g. psychological testing or radiological procedures) that may take too long as an outpatient;
- consultations with specialists in co-occurring conditions (e.g. eating disorders, personality disorders) or with physicians (e.g. for review of the stability of diabetes care); and
- multiple mental state examinations by the same professional to review stability of mood over time as well as high quality nursing observations of daily living skills and interpersonal relations.

Crisis admissions may be required:

- to de-escalate acute suicidal thinking and/or self-harming behaviour; and
- for crisis counselling and goal setting for a return to well-monitored outpatient care.

All admissions for inpatient care should be time limited, with clear goals set for the duration of stay. Risks associated with admission, such as regression, acting out and the potential for adoption of unhelpful behaviour modelled by other inpatients, must be considered and carefully managed.

Admission to an inpatient unit does not necessarily lead to prescription of medication; in some cases clarification of diagnosis can lead to initiation of an evidence-based psychological therapy.

Planning for discharge should begin from the time of admission, with the aim of encouraging adherence to treatment regimes and attendance at follow-up appointments. A post-discharge plan provided to the young person and if appropriate, his or her parents/carers, may be useful, which lists crisis numbers, as well as the dates, times, and contact details for follow-up appointments.

Inpatient environment

For both adolescents and young adults, inpatient admission, especially for the first time, can be a cause of anxiety and distress. Admission should be to a unit of similar aged peers, with highly developed staff expertise about the issues and challenges inherent to those developmental stages. Admission to adult mental health units is not advisable, as it may be difficult for young people to feel safe if they are on a ward with older adults who may be experiencing severe and/or long-standing psychiatric disorders. If there is no youth-specific unit, it is preferable to admit adolescents to a general paediatric unit rather than an adult psychiatric unit.

Young people admitted to inpatient care differ from those seen in community clinics by more often having disruptive behaviour symptoms as well as depression and having parents with higher levels of perceived family problems including misuse of alcohol (McDermott et al 2002). A safe environment, observation and engagement are critical elements of therapy for young people requiring psychiatric inpatient care (Rosina 2001).

Overall, there is a significant lack of evidence to guide use of inpatient care for young people with depression. Given the substantial investment in the inpatient service system this should be a priority area for future research.

Good practice point

32 If inpatient care is required, admission should be to an environment designed for young people wherever possible.

C5 Management of bipolar disorder in young people

Depressive symptoms and depressive episodes may be the first episode of a bipolar disorder; this is more likely in young people who present with hypomania in response to antidepressant medication, psychotic features and a family history of bipolar disorder (Zalsman et al 2006). Earlier onsets, mixed and atypical states are likely to predict bipolar disorder rather than major depressive disorder (Benazzi 2007; Takeshima et al 2008).

Bipolar disorders often begin in late adolescence. Once the condition is established, people with bipolar disorder spend approximately half the time experiencing the normal range of mood states. The remainder is spent in varying severity of mood states, most of which are typified by minor and subsyndromal symptoms, both manic and depressive (Joffe et al 2004).

The SLR found very little research on managing bipolar disorder in young people. The guidance in this section relies on overseas guidelines and evidence on managing bipolar disorder in adults.

C5.1 Treatment of bipolar disorder in young people

Bipolar disorder is a complex illness and various treatments are likely to be needed for different phases, for example the urgent management of agitation, acute manic episodes, acute depression and maintenance therapy. The effectiveness of any treatment program, pharmacological or psychological, depends on its ability to target selective problems in specific phases of the illness (Lam 2006).

Young people with bipolar disorder are likely to present for treatment during an acute illness episode (mania, depression or mixed state). The objective of acute treatment is to ensure safety as well as reduce the severity and shorten the duration of the acute episode. Long-term treatment is indefinite, and aims to prevent new episodes and achieve adequate control of residual or chronic mood symptoms between episodes and promote psychosocial functioning at the highest possible level. Due to the high risk of relapse and progression to more frequent episodes, long-term pharmacological treatment is advocated from as early in the illness course as is acceptable to the young person and his or her family (Goodwin et al 2009).

Before establishing any treatment regime, the assessment process detailed in Section C2 should be applied. The Canadian Network for Mood and Anxiety Treatments and International Society for Bipolar Disorders (CANMAT-ISBD) guidelines emphasise the need to review general principles (Yatham et al 2009):

- revisiting safety issues;
- considering the most appropriate treatment setting;
- discontinuing antidepressants (if acute mania presentation);
- investigating and excluding organic aetiological factors;
- discontinuing caffeine, alcohol and illicit substances; and
- initiating an ongoing psychosocial process including psychoeducation.

C5.1.1 Non-pharmacological therapies

The SLR identified no RCTs of non-pharmacological therapy for treating adolescents presenting with bipolar disorder. There is very limited evidence on non-pharmacological treatments for bipolar disorder in young adults. In one average quality RCT, family-focused therapy was superior to enhanced care in providing a faster recovery from an acute episode of depression or mania and prolonging the time spent in remission (Miklowitz et al 2008).

In the absence of adequate information relating to young people, it is appropriate to refer to clinical guidance for adults. A large US study randomised patients with bipolar disorder to one of three intensive psychosocial treatments (30 sessions over 9 months of family-focused therapy, interpersonal and social rhythm therapy or CBT) in conjunction with best practice medication treatment or a control treatment (Sachs et al 2007). Over 1 year, being in any of the intensive psychotherapies was associated with a higher recovery rate from depression than being in the control group (Miklowitz et al 2007). This suggests that psychological therapy may be important in stabilising episodes of depression in bipolar disorder (Goodwin et al 2009).

The British Association for Psychopharmacology evidence-based guidelines for treating bipolar disorder (Goodwin et al 2009) advise that key components of successful psychological therapies for bipolar disorder in adults include:

- knowledge and psychoeducation with improved evaluation of personal risks posed by the illness;
- self-monitoring;
- self-regulation (action plans and modification of behaviours); and
- increased adherence to medications.

This advice is consistent with the CANMAT-ISBD update (Yatham et al 2009), which advises that a range of psychosocial interventions have demonstrated benefit as adjuncts to medication in decreasing medication requirement, relapse rate and duration of hospitalisation. At a minimum psychoeducation is seen as 'an essential component of clinical management' (Yatham et al 2009, p227).

Good practice point

33 Psychoeducation and psychological interventions to improve management and assist with coping skills and psychosocial functioning are valuable adjuncts to pharmacological treatment.

C5.1.2 Pharmacological treatment

The first requirement for pharmacological treatment may be for an emergency phase of severe agitation. There is evidence from RCTs for the efficacy of intramuscular administration of olanzapine, aripiprazole and lorazepam (Centorrino et al 2007; Zimbroff et al 2007). When possible oral administration by a rapidly dissolving wafer is preferable.

The main pharmacological treatments for managing bipolar disorder are mood-stabilising agents (lithium, anticonvulsants and atypical antipsychotics) and antidepressants.

Results of the SLR highlight the limited evidence base on treating bipolar disorder in adolescents.

- *Anticonvulsant versus placebo* — the evidence is inconclusive so that it is not possible to determine whether there is a clinically important difference between anticonvulsants and placebo in adolescents with bipolar disorder experiencing a manic or mixed episode (Delbello et al 2005; Wagner et al 2006b).
- *Anticonvulsant versus atypical antipsychotic* — the evidence is inconclusive and so it is not possible to determine whether there is a clinically important difference between anticonvulsants and atypical antipsychotics in adolescents with bipolar disorder experiencing a manic or mixed episode. Of the significant findings, quetiapine was favoured over divalproex (Delbello et al 2006).
- *Anticonvulsant plus atypical antipsychotic versus anticonvulsant plus placebo* — in one small study, the addition of atypical antipsychotics was favoured over anticonvulsants alone to reduce mania symptoms in adolescents with bipolar disorder (Delbello et al 2002).
- *Antipsychotic versus placebo* — one study favoured atypical antipsychotics over placebo as a means of reducing mania symptoms and improving functioning in adolescents with bipolar during either main or mixed episodes.
- *Lithium versus placebo* — one small study favoured lithium over placebo to treat bipolar disorder and substance misuse in adolescents where the two co-occur (Geller et al 1998).

No studies were identified that met the inclusion criteria for the SLR for pharmacological treatment of bipolar disorder in young adults.

In the absence of specific research in young people, clinical guidance relies on extrapolation of research with adults. Given that most adult studies recruit participants from 18 years of age and older, adult evidence is most reliably generalised to the young adult population. Several Cochrane reviews on the treatment of acute mania in adults have been published.

- *Risperidone alone or in combination for acute mania* (Rendell et al 2006). Key findings include that risperidone, both as monotherapy and adjunctive to a mood stabiliser, is more effective than placebo at reducing the symptoms of acute mania. Risperidone was as effective (monotherapy or adjunctive) as haloperidol. Risperidone had fewer adverse effects than haloperidol although sedation, extra-pyramidal adverse effects and weight gain remained important clinical issues. Three caveats to the study should be noted: there was a higher withdrawal rate for participants on risperidone, all six studies were funded by the makers of risperidone and lastly there are limitations in generalisation of findings given the exclusion of participants with co-occurring conditions such as substance misuse (Rendell et al 2006).

- *Olanzapine alone or in combination for acute mania* (Rendell et al 2003). The results of this review were similar to the results of the Cochrane review of risperidone for acute mania. Findings from a meta-analysis of six trials (n=1,422 participants) found olanzapine monotherapy was superior to placebo in reducing acute symptoms of mania. The response rate for olanzapine was not significantly higher than the rate for haloperidol but was higher than for divalproex. Increased somnolence and weight gain were found in the olanzapine group.
- *Valproate for acute mood episodes in bipolar disorder* (Macritchie et al 2003). All studies cited were interventions for mania. Three trials compared valproate with placebo, other trials compared valproate with active treatments: lithium, carbamazepine, haloperidol and olanazapine. Valproate was found to be more efficacious than placebo at treating mania and equally as effective as lithium and carbamazepine. Valproate was less effective than olanzapine, although it caused less sedation and weight gain (Matrichie et al 2003). Note that valproate should not be prescribed for women of childbearing age (see below).

There are several high quality clinical practice guidelines for bipolar disorder in adults. The CANMAT-ISBD update (Yatham et al 2009) recommended that the management of acute mania remained essentially unchanged from the 2005 guidelines and 2007 update. Lithium, valproate and atypical antipsychotics were recommended as the first line of management. For bipolar depression, lithium, lamotrigine and quetiapine monotherapy were advised. First-line treatment options for maintenance therapy of bipolar disorder were lithium, lamotrigine and olanzapine (Yatham et al 2009).

Good practice points

34 Considerations in decision-making about pharmacological treatments include past history of mania or family history of bipolar disorder, severity of symptoms, need for short-term stabilisation, previous dosage regime and adherence to treatments, and reasons for any non-adherence.

35 Serious agitation may require adjunctive medication, consistent with local prescribing protocols. If the patient is less unwell, lithium can be the initial drug of choice.

36 Short-term medication is generally required for acute mania, preferably with rapid-acting anti-mania medications.

37 Medication used for short-term stabilisation (e.g. for agitation) should be tapered and discontinued.

38 If symptoms are severe or the young person does not respond to treatment, combination pharmacological treatment is justified.

Pregnancy and postpartum

Several issues are relevant to young women with bipolar disorder who are considering pregnancy, pregnant or postpartum. These issues are discussed and recommendations given in the *Clinical Practice Guidelines on Depression and Related Disorders (Anxiety, Bipolar and Puerperal Psychosis) in the Perinatal Period,* which is available on the *beyondblue* website.

Anticonvulsant use in pregnancy is associated with an increased risk of major birth defects, with rates being dose dependent (Meador et 2008), and highest when using valproate (Bowden 2003; Koren et al 2006; Meador et al 2006; 2008). Therefore, valproate should not be prescribed for bipolar disorder in women of childbearing age.

There is a high risk of relapse of bipolar disorder during pregnancy (Viguera et al 2007) and postpartum (Munk-Olsen et al 2007; Payne et al 2007). If a decision is taken to discontinue or decrease a mood stabiliser during pregnancy or after the birth, it is important to closely monitor and have a plan to identify relapse early. Postpartum, women with a history of bipolar disorder should be monitored carefully in the first few weeks after the birth, as they are at much greater risk of developing puerperal psychosis (Jones 2008). With breastfeeding, on balance there is a very small medication exposure to the infant from breast milk. The exception to this is lithium, which has variable concentrations in breast milk; therefore, close monitoring of the infant is required, including serum lithium levels.

Given the high prevalence of relapse, specific issues including safety of pharmacological treatment and crucial impact of less than optimal management on mother-infant attachment, bipolar disorder in pregnancy and the postpartum period is an area where specialist input should be a normal part of care.

Good practice point

39 Specialist input should be sought for the care of young women with bipolar disorder who are considering pregnancy, pregnant or in the postpartum period.

C5.2 Continuing treatment and relapse prevention

In the adult literature a recurrence of depression was predicted by residual depression or manic symptoms at recovery; similarly, manic relapse was predicted by residual manic symptoms at recovery (Perlis et al 2006). More than three previous affective episodes (depression or mania) also significantly increased relapse likelihood (Judd et al 2008). Based on this data, the CANMAT-ISBD guidelines recommend aggressive treatment until 'full remission' (Yatham et al 2009, p234) of the index episode.

C5.2.1 Early warning signs and relapse prevention

One Cochrane review (Morriss et al 2007) considered the issue of relapse prevention in individuals with bipolar disorder. Six studies with usable data were cited, and no study included participants younger than 18 years of age. Studies compared treatment as usual (TAU) with TAU plus an early warning symptoms and signs (EWS) intervention. Key findings favouring the EWS group were earlier identification of first recurrence of bipolar disorder, a lower percentage of participants hospitalised and improved functioning in the EWS.

Good practice point

40 A consistent, long-term, flexible relationship between the young person, his or her parents/carers and one health professional is the ideal arrangement for outpatient care in patients whose condition has been stabilised. Young people's family members should feel comfortable contacting the health professional to report escalations of symptoms or other emergencies.

PART D Current research limitations and future directions

Throughout these Guidelines the lack of research on which to formulate evidence-based practice recommendations has been highlighted. While research into adolescent depression has increased significantly over the past decade, there remain many unanswered questions across the continuum of care. For young adults, very little evidence was identified in the SLR, most likely because the young adult developmental phase is a relatively recent area of research interest. This section identifies a range of research priorities required to guide clinical practice in this important area.

Risk and protective factors

Longitudinal studies can investigate depression before its onset and therefore are informative of risk and protective factors. Such studies involve long-term commitment, often over several decades, and are expensive. Nevertheless, new longitudinal studies are indicated that are based on advances in study design (such as accelerated cohort studies) to provide more timely information. As with previous studies, new longitudinal studies should focus on a broad range of risk factors, but they should also include additional factors of interest where little is currently known.

- *Depression-specific* — The inclusion of specific measures of depression would more accurately quantify risk and/or protective factors that could be targets for future preventative interventions.
- *Biological markers* — New potential biological markers of depression are an intriguing area of current research; with appropriate ethics approval and consent, hormonal, genetic, molecular and other markers could be investigated and related to risk, protection and treatment effectiveness.
- *Other risk factors* — Factors including experiencing bullying and violence, difficulties with adjusting to sexual development or same-gender sexual orientation are widely recognised as contributing to the development of depression but have not been included in longitudinal studies to date.
- *At-risk groups* — Existing longitudinal studies, often with data collected from birth to young adulthood, could be analysed to better inform on risk and protective factors in at-risk groups such as children with past abuse experience, Aboriginal and Torres Strait Islander youth, youth from a sexual minority and gender diverse group and youth from culturally and linguistically diverse backgrounds.

Studies with large sample sizes can assess the relative contribution of multiple risk and protective factors.

Prevention

The benefits of preventing illness, in terms of decreasing suffering and impairment and increasing the cost-effectiveness of service delivery are well documented. In terms of preventing depression, the strongest research in young people has involved cognitive behavioural interventions in adolescents, with the quality and amount of research into other approaches being relatively minimal. The evidence base on prevention in young adults is very limited.

The relative ease of access to the majority of adolescents through educational systems remains a strong argument for continued research and development in these important areas, including further investment in research into potential universal interventions.

More rigorous research studies are needed (e.g. with blinded interviews) on the benefits of preventive interventions, including longer follow-up periods and active control groups, as well as investigation of strategies to maintain the short-term benefits seen in several studies of cognitive behavioural approaches. Specific requirements are:

- identifying risk factors most amenable to change, and patterns of risk factors that can be used to identify those young people most likely to respond to preventive interventions;
- focusing on elements of programs that produce the largest effects (e.g. programs targeting young people at high risk);
- developing alternative programs that might be more effective for harder to reach groups, including males (such as online cognitive behavioural programs); and

- trialling novel approaches to making prevention programs more effective (e.g. peer-led prevention programs for young people at high risk; use of internet content as an adjunct to intervention).

Effectiveness trials are needed to test whether prevention interventions that looked promising in controlled efficacy trials are also effective when delivered under real-life conditions. Such studies need to investigate and report on fidelity of implementation and participation (i.e. whether the young participants attend the program and are engaged throughout its course).

Specific areas of future research interest in prevention are outlined in Section B2.

Table D1 summarises the deficits in current knowledge by showing the quality of the evidence available in each area of prevention. The letters A to D represent the grading of the evidence summaries from the SLR, and '—' indicates that no study was identified on which to base an evidence statement.

Table D1 Deficits in current knowledge: prevention of depressive disorders in adolescents and young adults

	Adolescents*	Young adults**
Universal prevention		
Psychosocial interventions (generally)	A B	C C
Parent training/counselling	C	D
Training (behaviour management, transition)	—	C C
Meditation	—	D
Vitamin supplementation	—	C
Selective prevention		
Psychosocial interventions (various risk groups)	C C D D D	C C C C D
Family-focused interventions	B	—
Exercise	C	—
Indicated prevention		
Cognitive behavioural interventions	B	C
Interpersonal psychotherapy	C	C
Bibliotherapy	C	—
Adventure-based therapy	—	D
Exercise	—	D

Notes: * Refers to the systematic literature review evidence statements.
** Research specific to young adults therefore not inclusive of broader adult research.

Treatment

For both psychological and pharmacological treatments, current research in the adolescent and young adult age groups has focused on the initiation and short-term treatment of an episode of major depressive disorder. Few studies have 6-month, 12-month or longer term post-treatment evaluations; this is especially true of published pharmacological treatment studies.

Two recent studies do inform the question of whether a combination of therapies is more effective than psychological or pharmacological treatments alone. However, other important dimensions of treatment of depressive disorders in adolescents have little or no published data and therefore no evidence upon which recommendations can be based.

There is some literature on treatments as diverse as exercise, yoga, bright light therapy and family-focused therapy. As a generalisation, such interventions are rarely investigated with the rigour of a randomised controlled trial in the adolescent and young adult age groups.

Psychological therapies

For adolescents, most studies have focused on treatment of the acute episode more often by well-established therapies (CBT and IPT). For the age range of these Guidelines, there is no research on more recently developed psychotherapies such as acceptance and commitment therapy, behavioural activation therapy and mindfulness-based cognitive therapy. There is also a need for research to identify the characteristics that predict the treatment from which a particular individual is most likely to benefit.

For psychotherapy, there is insufficient evidence for recommendations on:

- the optimum number of psychotherapy sessions to obtain symptom remission;
- the minimum effective session number;
- the most advisable frequency and duration of psychotherapy;
- the type of therapy that is most likely to be effective for particular individuals; and
- the timing, number or usefulness of booster sessions.

Pharmacological treatment

For adolescents, most studies have focused on medications that have been available for longer (SSRIs and tricyclic antidepressants) and there is, understandably, little evidence on newer pharmacological agents. Questions that cannot be satisfactorily answered from current research include:

- the optimum medication dosage to obtain symptom remission (only one, small sample, dose-titration study was identified);
- characteristics that lead to antidepressants being prescribed as first-line therapy;
- the most advisable duration of pharmacological treatment;
- whether a maintenance dose needs to be at the same level as the initial dose or maintenance can be at a lower dosage level;
- evidence-based drug-cessation schedules; and
- treatment of adolescents presenting with bipolar disorder.

Almost no data exist about the benefits or safety of using multiple-drug therapy, for instance the additional benefit of introducing a mood stabiliser for an individual with an inadequate response to treatment for major depressive disorder. Slightly more information (one study) is available for drug combinations in bipolar depression and for maintenance of therapeutic gains in bipolar disorder. The quality of current research is insufficient to derive an adolescent or young adult-specific evidence-based medication algorithm.

Differential treatment effectiveness

Sub-analyses of treatment effectiveness of either psychological therapies or pharmacological treatment to assess differential effects by age, gender, ethnicity or distinguishing elements of the depressive disorder have not been published. It may be that a pharmacogenetic study can specify treatment effectiveness in individuals with varying genotypes. Alternatively, further specification of depressive behavioural phenotypes (e.g. the form of depression, symptom classifications) may relate to a particular psychological or pharmacological treatment. Despite depression probably being heterogenous in aetiology, there remains a ‘one treatment fits all’ approach.

Treatment outcomes

- *General* — Few studies have examined the effect of SSRIs in improving outcomes beyond symptom relief or remission of depression, for example quality of life, and few have outcome data beyond the immediate post-treatment stage. There have been attempts to measure depression-free days, and to develop a quality-adjusted life years (QALY) measure of disease burden, but further research is needed in this area.

- *At-risk groups* — Very little research was identified on treatment outcomes in specific at-risk groups. There is little evidence of stratification of published studies by risk group, probably because resultant sample sizes are too small for meaningful statistical analysis. As a result, the interpretation of treatment outcome research must generalise 'all adolescents' or 'all young adults' rather than make more sophisticated comments on particular at-risk groups. It is plausible that some groups may benefit from different therapy types or adaptations of existing therapies. An evidence base for this is unlikely to develop unless funding is made available for studies of treatments or adaptations of treatments within specific at-risk groups, or the sample size of studies markedly increases to allow stratification, or there is more multi-centred or cross-national research that allows increased samples of numerically small but high risk for depression individuals.

Table D2 summarises the deficits in current knowledge, by showing the quality of the evidence available in each area of treatment. Note for some important treatment questions there are currently no studies.

Table D2 Deficits in current knowledge: treatment of depressive disorders in adolescents and young adults

	Adolescents*	Young adults**
Treatment acute episode		
Depression:		
(a) Monotherapy: psychological: CBT	**B C C C C C C**	**C**
psychological: IPT	**B C**	
psychological: Family	**C C C**	
(b) Monotherapy: pharmacological: SSRI	**B B C**	**C**
pharmacological: SNRI	**D**	
pharmacological: TCA	**C C**	
(c) Combined	**B**	**–**
(d) Other (ECT, TMS, bright light)	**D**	**D**
Optimum treatment dose		
(a) Psychological (session number)	**–**	**–**
(b) Pharmacological (dose)	**–**	**–**
Optimum treatment duration		
(a) Psychological	**C**	**–**
(b) Pharmacological	**C**	**–**
Adverse effects		
(a) Psychological	**–**	**–**
(b) Pharmacological	**B B**	**A**
Maintenance strategies		
(a) Psychological	**C C**	**–**
(b) Pharmacological	**D**	**–**
(c) Early warning interventions	**–**	**–**
Strategies for inadequate response to treatment		
(a) Changes in monotherapy	**C**	**–**
(b) Polytherapy options	**–**	**–**

	Adolescents*	Young adults**
Bipolar disorder		
Treatment acute episode:		
Mania:		
(a) Monotherapy: psychological	–	–
(b) Monotherapy: pharmacological	–	C C C C
(c) Polytherapy: pharmacological	–	C
(d) Combined	–	–
Depression:		
(a) pharmacological	–	–
Maintenance strategies (bipolar)		
(a) Psychological	–	–
(b) Pharmacological	–	C

Notes: * Refers to the systematic literature review evidence statements.
** Research specific to young adults therefore not inclusive of broader adult research.

In summary, it is clear that much more research is required, to replicate existing findings, to validate the effectiveness of innovative treatments and to address crucial clinical questions across the continuum of care. Given the burden of depressive disorders in these age groups and the impairment of these conditions, both health professionals and consumers should strongly advocate for more research in this area. It is essential that future iterations of these Guidelines be based on good quality studies that can inform clinical practice.

Appendices

1 Membership and terms of reference of the Expert Working Committee

Member	Representing
A/Prof Brett McDermott (Chair)	***beyondblue* Board, child and adolescent psychiatry** In my capacity as a child and adolescent psychiatrist I hold the following appointments: • Executive Director, Mater Child and Youth Mental Health Service, South Brisbane, Queensland; • Associate Professor of Child and Adolescent Psychiatry, University of Queensland; • Director, *beyondblue: the national depression initiative*; and • Bi-Fellow Churchill College, Cambridge University. I also hold various other appointments and memberships including being a: • Fellow of the Royal Australian and New Zealand College of Psychiatrists (RANZCP); • Member of the Faculty of Child and Adolescent Psychiatrists; and • Member of the National Mental Health Expert Committee on Natural Disasters.
A/Prof Michael Baigent	***beyondblue* Clinical Advisor** I am a psychiatrist and addiction specialist. I am employed as an Associate Professor at Flinders Medical Centre and Flinders University, where I work as the Clinical Director of the Centre for Anxiety and Related Disorders and within the University Department of Psychiatry. I also work as a senior specialist at Drug and Alcohol Services, South Australia. I receive payment from *beyondblue* to act as the Clinical Advisor. I also hold various other memberships and appointments including being: • a Fellow of the RANZCP; and • a Fellow of the Australasian Chapter of Addiction Medicine (RACP).
Dr Andrew Chanen	**Consultant psychiatrist with expertise in youth mental health** In my capacity as a consultant psychiatrist, I hold the following appointments: • Senior Lecturer, Centre for Youth Mental Health, The University of Melbourne, Australia; • Consultant Psychiatrist and Associate Medical Director, Orygen Youth Health, NorthWestern Mental Health Program, Melbourne Health; and • Consultant Psychiatrist, Adolescent Forensic Health Service, Royal Children's Hospital, Melbourne.

Dr Andrew Chanen (cont)	I also hold various other memberships and appointments including being: • a Fellow of the RANZCP; • President Elect of the International Society for the Study of Personality Disorders and have been a member of this organisation's Executive Board since 2003; • Vice President of the Australian and New Zealand Association for Cognitive Analytic Therapy; • a member of the Association for Research on Personality Disorders, International Early Psychosis Association; • a member of the Australasian Society for Psychiatric Research; and • a member of the Federal Minister for Health's Expert Reference Group on borderline personality disorder. I also serve on the Editorial Boards of *Personality and Mental Health* and *Early Intervention in Psychiatry*.
Ms Lesley Fraser	**Australian Guidance and Counselling Association** As a health clinician in this area, I: • am employed by the Department of Education, Tasmania, as a School Psychologist; and • am Immediate Past-President of Australian Guidance and Counselling Association.
Dr Brian Graetz	***beyondblue* Education and Early Childhood** As a health and education professional, I: • am currently employed by *beyondblue* to oversee their national programs in education and early childhood focused on mental health promotion, prevention and early intervention; • was previously employed at the Women's and Children's Hospital in South Australia, as a clinical psychologist and senior program manager for the Child and Adolescent Component of the Australian National Mental Health and Wellbeing Survey; and • was employed for 10 years as a school teacher in Catholic Education in South Australia.
A/Prof Noel Hayman (Wakka Wakka and Kalkadoon)	**Royal Australian College of Physicians (RACP): Aboriginal and Torres Strait Islander Health Expert Advisory Group** My current position is Clinic Director, Inala Indigenous Health Service, Queensland Health. My expertise is in Aboriginal and Torres Strait Islander Health. Other appointments include: • Associate Professor, School of Medicine, University of Queensland; • Board member, Australian Medical Association Queensland; • Board member, Andrology Australia; • Chair, Expert Advisory Group, Aboriginal and Torres Strait Islander Health, RACP; • Visiting Medical Officer, Queensland Corrective Services; and • Co-Chair of the NHMRC Cardiac Rehabilitation Working Committee, which developed the *Strengthening Cardiac Rehabilitation and Secondary Prevention for Aboriginal and Torres Strait Islander Peoples: A guide for health professionals* (2005).

Professor Louise Newman	**RANZCP: Faculty of Child and Adolescent Psychiatry** I am a Child and Adolescent Psychiatrist and hold the following appointments: • Director, Centre for Developmental Psychiatry and Psychology, Monash University, Melbourne; • Professor of Developmental Psychiatry, Monash University, Melbourne; • Conjoint Professor of Child and Adolescent Psychiatry, Newcastle University; and • Immediate Past-President, RANZCP. I am also: • Chair of the Detention Expert Health Advisory Group, Department of Immigration and Citizenship; • Member of the National Mental Health Expert Committee on Child Trauma; and • Consultant to the Family Court of Australia.
Dr Nikunj Parikh (as of 31 August 2009)	**Royal Australian College of General Practitioners (RACGP)** As a health professional in this clinical area, I: • work full-time as a GP in a predominantly Aboriginal community in western Sydney. I treat adolescents and young adults with depression and suicidal thinking. I also have a degree in psychology and have a special interest in counselling and CBT; • teach medical students and GP registrars; and • am an examiner for Fellowship of the RACGP.
Ms Bernadette Peirce	**blueVoices consumer** I have been an active member of blueVoices since 2008 and as part of my role I was able to use my experience as a young consumer of a variety of mental health services to help inform the structure and content of the Guidelines. I hold a Bachelor of Arts in Psychology and I am currently employed as a Counsellor at the Alcohol and Drug Information Service, Drug and Alcohol Office of Western Australia.
Dr Jenny Proimos	**RACP: Paediatrics and Child Health Division** I am a consultant paediatrician and adolescent health physician. Since 1999, I have held a clinical appointment at the Centre for Adolescent Health, Royal Children's Hospital, Melbourne. I also work as a Senior Medical Advisor at the Department of Education and Early Childhood Development in Victoria, advising the Victorian State Government on child and adolescent health policy. Between May 2008 and May 2010, I was President of the Paediatrics and Child Health Division of the RACP, the peak organisation responsible for the training of paediatricians in Australia and New Zealand. I also sit on the board of the Foundation for Young Australians, a philanthropic non-profit organisation whose mission is to 'empower young Australians to be successful learners and creative, active and valued citizens'.
Ms Thelma Smalley	**blueVoices carer** I am a volunteer with *beyondblue* in the capacity as a carer of family members with major depression, bipolar disorder and depression and anxiety. I have been affiliated with *beyondblue* over the past 4 years and as a blueVoices member have been involved in numerous projects during this time. My role has purely been to represent the carer's perspective on each of these committees.

Professor Sue Spence	**Australian Psychological Society (APS)** I am currently Deputy Vice Chancellor (Academic) at Griffith University, but continue a role as a clinical psychologist, academic and researcher in areas relating to the assessment, treatment and prevention of child and adolescent anxiety and depression. I: • am employed by Griffith University, Queensland; • have published refereed journal articles, book chapters relating to the prevention and treatment of adolescent depression; • am co-editor of the classroom program materials from the *beyondblue* schools project for prevention of depression among teenagers; and • represented the APS on the Working Party on the Identification, Assessment, Diagnosis, Prevention and Management of Depression in Young People, which developed the NHMRC *Clinical Practice Guidelines: Depression in Young People* (1997) (rescinded 2004).

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Ms Christine Benger, Senior Program Manager: National Guidelines Development

Ms Rita Butera, Director: Research & Planning (until 21 August 2009)

Ms Suzanne Pope, Director: Research & Planning (as of 19 November 2009)

Contractors — systematic literature review

Ms Tracy Merlin, Adelaide Health Technology Assessment

Ms Skye Newton, Adelaide Health Technology Assessment

Contractors — technical writing of Guidelines

Ms Elizabeth Hall, Ampersand Health Science Writing

Ms Jenny Ramson, Ampersand Health Science Writing

NHMRC observer

Ms Kay Currie (until 2 March 2010), NHMRC National Institute of Clinical Studies

Previous member

A/Prof Leanne Rowe (until 17 June 2009)
Royal Australian College of General Practitioners

Terms of reference

The Expert Working Committee will:

1. Update the NHMRC *Clinical Practice Guidelines: Depression In Young People* (1997) (rescinded[5]) (the Guidelines) to provide health and other service providers, consumers, families and carers with the most current evidence-based clinical practice guidelines which make recommendations for the prevention, identification, treatment and management of the symptoms of depression in adolescents and young adults, by having regard to:
   - the rescinded Guidelines and advising of those aspects which should be carried forward into the updated Guidelines;
   - the best available current scientific evidence;
   - comments and submissions provided by the broader community through public consultation;
   - the needs of health service providers, carers and consumers;
   - current community concerns about the effectiveness and side effects of antidepressant and other pharmacological agents used to treat depression in adolescents and young adults; and
   - any other relevant matter.
2. Develop a comprehensive public consultation strategy.
3. Develop dissemination, implementation and feedback strategies.
4. Work with the contractors engaged by *beyondblue* to undertake the systematic literature review and the technical writing / editing of the updated Guidelines to achieve this task to the highest quality and rigour.
5. Provide the Board of *beyondblue* with draft and final updated Guidelines at key points in the developmental process, particularly:
   - for approval of the draft updated Guidelines for release for public consultation; and
   - for submission to the Chief Executive Officer (CEO) of the NHMRC for approval of the final Guidelines under S.14A of the *NHMRC Act 1992* (Cwlth).
6. Obtain approval of the final updated Guidelines from the CEO of the NHMRC.

5 The new term under the *NHMRC Act 1992* (as amended in 2006) is 'revoked'.

2 Overview of the guideline development process

beyondblue has developed these clinical practice Guidelines (the 2011 Guidelines) with the aim of providing evidence-based best practice guidance for the prevention, identification, treatment and management of the symptoms of depression and depressive disorders in adolescents and young adults.

More specifically, the 2011 Guidelines aim to improve health outcomes by:

- limiting the duration and impairment from depressive symptoms;
- preventing conversion of depressive symptoms into depressive disorder;
- preventing new episodes of depressive disorder; and
- promoting effective treatment, limiting illness duration, advising on strategies if there is an inadequate response to treatment and helping to prevent relapse.

The developmental process began in 2008 as a revision and update of the NHMRC *Clinical Practice Guidelines: Depression in Young People* (1997) (the 1997 Guidelines). The NHMRC Council rescinded the 1997 Guidelines in December 2004.

With the rescinding of the 1997 Guidelines, an unmet need existed in Australia for guidelines based on the best available current evidence that contain clinical practice recommendations for healthcare professionals, consumers, carers, families and friends to support and assist young people who may be experiencing depressive symptoms, or who have been diagnosed with depression.

beyondblue considered it important that the 1997 Guidelines be updated, in view of over a decade of published research since their development and two main areas of controversy, about which health professionals and consumers would benefit from guidance:

- the most up-to-date evidence on effectiveness of antidepressants, particularly the widely prescribed selective serotonin reuptake inhibitors (SSRIs); and
- evidence of the relative benefits and harms of these medications, particularly as they relate to possible increased suicidal thinking, behaviours and actions of adolescents and young adults taking these medications.

An early decision of the Expert Working Committee was that entirely new guidelines were required in the light of new data, burgeoning research in the area and changes in community awareness, policy and services over the last decade.

Expert Working Committee

An Expert Working Committee was established in 2008 to develop the draft 2011 Guidelines. Membership included consumers, carers and representatives from relevant health professions including psychiatrists, physicians, Aboriginal and Torres Strait Islander health experts, general practitioners, psychologists and school counsellors. An observer representing the NHMRC attended two of the meetings, and was consulted on issues regarding NHMRC processes and requirements as necessary.

Intellectual property joint ownership

Consultants to the process included members of Adelaide Health Technology Assessment (AHTA) who completed the systematic literature review, and who, under their contract with *beyondblue*, as tenants-in-common, jointly own the intellectual property rights in the project material and any material created under the contract.

Technical writers

Ampersand Health Science Writing was responsible for drafting and editing the Guidelines (informed by the SLR).

beyondblue

beyondblue staff managed the overall guideline development process.

Managing competing interests

All members were asked to complete a 'Certification of Disclosure of Interest' form prior to acceptance onto the Expert Working Committee.

Members were also requested to advise *beyondblue* and the Chair of the Expert Working Committee if any potentially competing interest arose during the development of the Guidelines; for example, being offered an honorarium to present at a pharmaceutical company event or support (financial or in kind) to attend conferences, workshops or the like. A review of potential conflicts of interest was undertaken at every committee meeting.

In the case of a member being an author of a paper under discussion, where it could be seen to present a competing interest, particularly in the development of either a recommendation or a good practice point (GPP), members were asked to temporarily leave the meeting. This was to avoid the potential for influencing any decision made and was duly recorded in the minutes of the meeting.

The conflict of interest system management process was robust, transparent and referred to frequently. Discussions about honoraria and authorship were the most common conflict of interest issues identified or declared. One issue of a superannuation fund including pharmaceutical shares was raised. Following legal advice no conflict of interest was noted. To avoid the perception of conflict of interest the member disposed of these shares.

Process

The development of the Guidelines followed the key principles and processes outlined in the document: *NHMRC Standards and Procedures for Externally Developed Guidelines*, http://www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/nh56.pdf

The formulation of levels of evidence and grades for recommendations has also followed the document: *NHMRC Additional Levels of Evidence and Grades for Recommendations for Developers of Guidelines — Stage 2 Consultation — end June 2009.*

The development of the Guidelines was informed by a systematic literature review (SLR), the process of which is outlined in Appendix 3. The full SLR will be published to accompany the Guidelines.

Public consultation

The draft Guidelines were released for a 60-day public consultation, as required in the *NHMRC Act 1992* (as amended), so that the final Guidelines could be submitted for approval by the CEO of the NHMRC, under Item 14A *Approval by CEO of guidelines for third parties,* under the Act.

Although the minimum requirement for the public consultation is 30 days, *beyondblue* wished to provide stakeholders and the public with plenty of opportunity to make comments on and suggestions for the draft Guidelines, and so a 60-day consultation period was selected (13 March to 12 May 2010).

The draft Guidelines underwent a rigorous consultation process during which time:

- interested stakeholders, individuals and organisations were invited to submit written comments; and
- a series of national workshops for consumers and carers and for healthcare professionals, was held in capital cities and/or regional centres in each State and Territory.

The public consultation commenced by way of an advertisement in *The Weekend Australian* of 13 March 2010 and formally ended on 12 May 2010.

Summary of issues raised through the consultation process

The overall tone of the submissions and workshop participants was of wanting more from the consultation draft of the Guidelines — particularly practical guidance in key areas where there is no randomised controlled trial evidence, and information relevant to particular groups of young people. Key points raised were as follows.

- *Format of the Guidelines* — A number of submissions commented that the Guidelines were difficult to navigate, with many of the key clinical recommendations lost within the text.
- *Practical guidance* — In both submissions and workshops, there were requests for more practical advice overall.
- *Target audience* — A range of submitters felt that the Guidelines were too technical for consumers and carers.

- *Evidence base* — Apart from comments on the evidence base in specific areas, overall comments in the submissions related to the need to clarify how recommendations and GPPs were developed, and also that the reliance on high-level evidence makes under-researched areas appear to be ineffective because they are not supported by recommendations. There was also discussion in the workshops about the omission of therapies from the Guidelines due to a lack of high-level evidence, as well as much discussion about the need to clearly distinguish between evidence-based recommendations and guidance based on lesser evidence or expert opinion.
- *Omission of groups of young people at higher risk* — not acknowledging youth from sexual minority and gender diverse groups as at higher risk of depression sparked a considerable response both in submissions and in the workshops; responses identified the need to include discussion of systemic discrimination, specific risk and protective factors, statistics on prevalence and mortality, and guidance on how health services can be culturally responsive to needs that arise in the context of sexuality and gender diversity.

Three meetings of the Expert Working Committee were held in the months following consultation and all submissions were reviewed. Considerable redrafting was undertaken to address submission concerns outlined above.

The final Guidelines were submitted to the Council of the NHMRC in late 2010.

Implementation

Implementation is seen as a key issue for the uptake and appropriate use of the Guidelines. There are clear lessons from the 1997 Guidelines and other more recent work such as the UK NICE guidelines[6], including the need to provide brief summaries of information for general practitioners and consumers. The most profound change since the 1997 Guidelines is access of health information through the internet. Versions of the 2011 Guidelines will be available online. Degree of content detail will match the user group — for example, complete text for the Royal Australian and New Zealand College of Psychiatrists and the Australian Psychological Association website, concise easier access versions with treatment algorithms available through all Divisions of General Practice sites and more consumer and carer friendly documents through open access sites. The most obvious example of the latter is the *beyondblue* website. It is anticipated that the information will also be made available to other youth-orientated sites such as Reach Out and headspace.

Any dissemination strategy needs to be multi-faceted. It is anticipated that dissemination will not only be content based. Rather, access to the advantages of an evidence-based approach, the methodology of creating evidence statements and subsequent recommendations are reforms in the adolescent and youth mental health and counselling field that will accompany dissemination of the 2011 Guidelines. Committee members are committed to providing ongoing training in these areas following the release of the 2011 Guidelines.

Lastly, there are aspects of the 2011 Guidelines that will be published in the peer-refereed international literature. This reflects the fact that the 2011 Guidelines are underpinned by the most recent meta-analyses of adolescent and youth depression risk factors, prevention and management.

Costs of implementing the recommendations and good practice points

The Guideline recommendations for treatment of major depression in young people have two major costing implications.

The treatment of first choice is either CBT or IPT. These psychological therapies require dedicated training, supervision and a strategy to maintain treatment fidelity over time (e.g. strategies to prevent deviation of therapist practice away from the form of therapy that has demonstrated benefit in randomised controlled trials). Accreditation and re-accreditation may be considered suitable strategies to achieve these goals.

There are minimal cost implications associated with recommending the use of the medication with the strongest evidence base (fluoxetine) as this is not a new agent and both the original form and less costly alternatives are currently available. There may be cost implications associated with the advice to seek input from an expert in antidepressant therapy for young people if the response to fluoxetine and evidence-based psychotherapy is inadequate. While it is difficult to quantify on current data about the availability of telephone advice and access to private and public psychiatrists, this approach is likely to be cost-effective. In many areas this is consistent with the current model of care and is likely to be no greater than CBT/IPT training and compliance costs for evidence-based psychological therapies.

6 NICE (2005) *Depression in Children and Young People. Identification and Management in Primary, Community and Secondary Care.* British Psychological Society & Royal College of Psychiatrists. National Clinical Practice Guideline Number 28. Leicester: British Psychological Society.

Companion documents

Companion documents will be developed for specific groups, including GPs and other healthcare professionals, and young people, carers, family and friends.

Evaluation of the usefulness of the Guidelines

beyondblue is committed to assessing the impact of the Guidelines once the final Guidelines are released. To address this, *beyondblue* has engaged an independent organisation to undertake a baseline survey prior to the approval of the final Guidelines, and 6-month post-dissemination evaluation of the usefulness and uptake of the Guidelines, to test for any changes in clinical practice that occurred after the publication of the Guidelines. The evaluation will not seek to measure health outcomes, as it is considered there would be too many confounding factors to effectively assess and report on this, but will be looking for any change in practice by the target groups 6 months after the release of the Guidelines, which may contribute to improvements in health outcomes.

The evaluation will follow the process required in the NHMRC publication: *A Guide to the Development, Implementation and Evaluation of Clinical Practice Guidelines* (1999), Item 5.1.3 'Evaluation of the guidelines' contribution to changes in clinical practice and health outcomes'. The findings of the evaluation will inform the dissemination and awareness-raising process and may identify areas for providing improved training for key stakeholders, to support the implementation of the recommendations and good practice points.

Financial support

The Board of *beyondblue* committed funding and resources to the creation of the 2011 Guidelines. No other organisation, company or individual have provided financial or non-financial support for the development of the 2011 Guidelines.

3 Summary of the systematic literature review

This appendix provides a summary of a series of systematic literature reviews conducted by Adelaide Health Technology Assessment (AHTA) to inform the development of these Guidelines. The review aimed to determine the risk and protective factors for depression, how depression can be prevented, how it can be treated, and how risk factors impact on outcomes, in the population of adolescents (aged 13 to 18 years) and young adults (aged 19 to 24 years). The methodology for the review is outlined briefly below.

The evidence collected formed the basis for a series of evidence statements, which were translated into recommendations by the Expert Working Committee. Table A3.5 lists the evidence statements and provides cross-references to discussion of the evidence in the Guidelines and any associated recommendations.

The full report of the literature review is available from the *beyondblue* website.

Research questions

The following research questions formed the basis of the review.

Risk factors and protective factors

What are the biopsychosocial risk factors and protective factors for depression in adolescents and young adults?

Prevention

What are the benefits, harms/side effects and cost-effectiveness of prevention strategies for depression in adolescents and young adults?

Psychosocial and physical therapies

What are the benefits, harms/side effects and cost-effectiveness of management strategies/ psychological or physical treatments for depression in adolescents and young adults?

Pharmacological treatments

What are the benefits, harms/side effects and cost-effectiveness of pharmacological interventions for depression in adolescents and young adults?

Combined therapies

This section included studies that provided evidence on the combination of the following two research questions.

What are the benefits, harms/side effects and cost-effectiveness of pharmacological interventions for depression in adolescents and young adults?

What are the benefits, harms/side effects and cost-effectiveness of management strategies/ psychological or physical treatments for depression in adolescents and young adults?

Prognosis

How do biopsychosocial risk factors and protective factors impact upon the course of depression and outcomes in adolescents and young adults?

Search strategy

A systematic search of medical, psychological and educational literature was conducted to identify relevant studies to answer the research questions. Studies published since 1966 (or inception of the database) were identified through searching of bibliographic databases, consulting content experts in the relevant fields for additional studies, and hand-searching the reference lists of included studies for other potentially relevant articles.

Table A3.1 Bibliographic databases searched

Bibliographic database	Time period
CINAHL	1977–11/2008
Cochrane Library – including, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, the Cochrane Central Register of Controlled Trials (CENTRAL), the Health Technology Assessment Database, the NHS Economic Evaluation Database	1966–11/2008
Current Contents	1993–11/2008
EconLit (for cost-effectiveness analysis only)	1969–11/2008
Embase.com (includes Embase and Medline)	1974–11/2008
Education resources information center (ERIC)	1966–11/2008
Pre-Medline	2008
PsycInfo	1983–11/2008
Scopus – limit to Social Science	1966–11/2008
Web of Science – Science Citation Index Expanded	1995–11/2008

Additional sources of literature — peer-reviewed or grey literature[7] — were sought from the sources listed below, a range of relevant journals, and from health technology assessment agency websites.

Table A3.2 Additional sources of literature

Source	Location
Australian Clinical Trials Registry	http://www.actr.org.au
New York Academy of Medicine Grey Literature Report	http://www.nyam.org/library/grey.shtml
Trip database	http://www.tripdatabase.com
Current Controlled Trials metaRegister	http://controlled-trials.com/
National Library of Medicine Health Services/Technology Assessment Text	http://text.nlm.nih.gov/

Search terms

A series of literature searches were conducted to identify literature assessing the research questions on the prevention and management of depression in adolescents (aged 13 to 18 years) and young adults (aged 19 to 24 years). The key words and Medical Subject Headings (MeSH) were developed on a Medline/PubMed platform. The same text words and the relevant alternatives to MeSH indexing terms (i.e. EmTree headings) were used for the other bibliographic databases, where applicable.

Study selection criteria

Criteria for including studies in the systematic review were based on the PICO structure — Population, Intervention (treatment or risk factors), Comparator (against which an intervention's effectiveness is measured), and Outcomes of interest. Additional limits to the literature search included restricting the search to studies of a certain research design(s) (e.g. likely to provide unbiased or more reliable results), to a certain search period or language. In order to ensure that the selection of studies was not biased, these criteria were delineated before collating the literature.

7 Grey literature is literature that is not easily accessed or indexed on bibliographic databases, such as reports of health technology agencies or government bodies, or research reports that are too new to have been indexed yet in the bibliographic databases.

Studies were excluded if they:

- did not meet the inclusion criteria listed;
- focused on postpartum depression (separate clinical practice guidelines for perinatal mental health – *Clinical practice guidelines for depression and related disorders – anxiety, bipolar disorder and puerperal psychosis – in the perinatal period. A guideline for primary care health professionals* – were developed by *beyondblue* with support from NHMRC);
- focused on transient sadness or grief that occurs as a reaction to life events but does not affect sleeping patterns, appetite, or the ability to function;
- focused on management of depression within adults, without any discussion of how age influences outcomes, or subgroup analyses allowing data on young adults (19 to 24 years) to be separated from older adults (25 years old and older);
- did not state that the research was approved by an appropriate ethics committee;
- did not provide adequate data on the outcomes (e.g. in graphical format, missing information, format or type of data were unable to be used);
- were updated by the same research group on the same research question for the same patients, with no different information provided; or
- could not be retrieved within the timeframe.

For many treatments of interest there was no study in the adolescent or young adult age range or if a study existed it may have been excluded due to poor methodology. The latter included idiosyncratic referral or participant characteristics, exclusion criteria that made the study hard to generalise, poorly defined measurement or measures with non-specified psychometric properties, low sample size with insufficient power to find an effect, limited details of the intervention (either active or control or both) or conclusions that were not consistent with the results or not mindful of study limitations.

Studies were included if:

- depressive symptoms were measured;
- the main target of the treatment was depression or preventing the development of depression;
- types of clinical depression included: major depressive disorder, dysthymia, seasonal affective disorder, depression secondary to disease or injury, adjustment disorder with depression, bipolar depression (bipolar disorder, cyclothymic disorder), melancholic (biological) or non-melancholic (not primarily biological), psychotic depression, atypical depression, and mixed depression and anxiety; and
- for questions pertaining to treatment of depression, at least 70% of the participants had a diagnosis of depression, and the remaining participants had symptoms of depression.

Validity assessment

Studies that were included were critically appraised — in terms of internal and external validity — and the statistical and clinical relevance and applicability of results were determined using the NHMRC dimensions of evidence (NHMRC 2000a; 2000b). The evidence dimensions consider important aspects of the evidence supporting a particular intervention and include three main domains: strength of the evidence, size of the effect and relevance of the evidence (see Table A3.3). The first domain is derived directly from the literature identified as informing a particular intervention. The last two required expert clinical input as part of their determination.

Table A3.3 Evidence dimensions — criteria used to critically appraise each included study

Type of evidence	Definition
Strength of the evidence	
Level	The levels of evidence hierarchy reflects the potential of each study or systematic review included in the systematic review(s) underpinning the Guidelines to adequately answer a particular research question, based on the probability that its design has minimised the impact of bias on the results.*
Quality	The methods used by investigators to minimise bias within a study design.*
Statistical precision	The p-value or, alternatively, the precision of the estimate of the effect. It reflects the degree of certainty about the existence of a true effect.
Size of effect	The distance of the study estimate from the 'null' value and the inclusion of only clinically important effects in the confidence interval.
Relevance of evidence	The usefulness of the evidence in clinical practice, particularly the appropriateness of the outcome measures used.

Note: * *NHMRC Levels of Evidence and Grades for Recommendations for Developers of Guidelines* (NHMRC 2009).

Appraisal of the evidence

The strength of the evidence was collectively measured by the three sub-domains: level, quality and statistical precision.

The research design of each study included in the systematic review was assessed according to its place in a hierarchy. The hierarchy reflects the effectiveness of the study design to answer a particular research question. Effectiveness is based on the probability that the design of the study has reduced or eliminated the impact of bias on the results (NHMRC 2000b).

The designations of the levels of evidence were based on NHMRC levels of evidence and grades for recommendations for developers of guidelines (NHMRC 2009). This included the designations of levels of evidence for intervention studies together with questions on prognosis (how risk factors impact outcomes) and aetiology (what are the risk factors/protective factors). Due to the volume of evidence available, the Expert Working Committee agreed to restrict the systematic review to the highest level of evidence available for each intervention/risk factor assessed in the clinical research questions (i.e. for studies on risk factors, only prospective cohort studies or systematic reviews of prospective cohort studies were included).

Critical appraisal of the studies included in this systematic review was performed to evaluate their methodological quality, according to the likelihood that bias, confounding and/or chance had influenced the results. The NHMRC toolkit publication *How to Review the Evidence: Systematic Identification and Review of the Scientific Literature* (NHMRC 2000a) provides examples of critical appraisal checklists that may be used. Similar checklists were used for this systematic review, which were adapted and evaluated by the Scottish Intercollegiate Guidelines Network (SIGN) for the assessment of systematic reviews, randomised controlled trials, cohort studies and case–control studies. These checklists have been subjected to wide consultation and evaluation, and are accompanied by detailed notes on their use (SIGN 2008). Economic evaluation studies were evaluated using the Drummond checklist (Drummond & Jefferson 1996), which is recommended for Cochrane systematic reviews (Higgins & Green 2008). The SIGN checklists were chosen in preference to the ones suggested by NHMRC (2000a), as they are more comprehensive for assessing sources of bias.

Statistical precision

Statistical precision was determined using standard statistical principles. Small confidence intervals and p-values give an indication as to the probability that the reported effect is real (NHMRC 2000b). Where there were multiple statistical comparisons, the results were at risk of type 1 error (incorrectly rejecting the null hypothesis) if there was not a correction to the p-value (Cook et al 2004). Post-hoc subgroup analyses may not have adequate statistical power and may also have resulted in a breaking of randomisation (selection bias) and are therefore treated as hypothesis generating, requiring further formal evaluation.

Assessing size of effect and relevance of evidence

For intervention studies it is important to assess whether statistically significant differences are also clinically important. The size of the effect needs to be determined, as well as whether the 95% confidence interval includes only clinically important effects. Similarly, the outcome being measured should be appropriate and clinically relevant. Clinical and patient relevant outcomes should be used instead of surrogate outcomes, whenever possible. Inadequately validated (predictive) surrogate measures of a clinically relevant outcome should be avoided (NHMRC 2000a).

Effect sizes were used to provide a consistent measure of the comparative size of effect from one treatment compared to another (or no treatment). For prevention studies, Hedges' g was chosen as a method of determining effect size, as it uses a more conservative method of determining variance, which was considered more suitable than a Cohen's d, given the large proportion of studies on the prevention of depression in adolescents that are cluster randomised controlled trials. Within treatment studies, the majority of participants received individual interventions, rather than group interventions. Cohen's d was therefore considered appropriate to estimate effect sizes for treatment comparisons. Effect sizes were considered to have a small clinical impact if they were 0.2–0.3, medium if they were between 0.5 and 0.6 and large if they were 0.8 or over. If raw data were presented, a difference of at least 10% between treatment groups was used as an indicator of being potentially clinically relevant.

Data extraction and analysis

Standardised protocols and outcome definitions were used by the assessors to extract the data. Data extraction forms were developed prior to conducting the review to ensure the standardised extraction of outcome data for all study types. Evidence tables were used as a guide to summarise the extraction of data.

For intervention questions, meta-analyses of randomised and pseudo-randomised controlled trials were conducted where appropriate and tested for heterogeneity and publication bias. Data were stratified by type of depression (unipolar or bipolar) and age group (adolescents and young adults). All meta-analyses were performed using the software package Comprehensive Meta Analysis Version 2.2.048. (Biostat 2008). Random effects models were used in preference to fixed effects models, to provide a more conservative estimate of effect size, as it was assumed that the population parameters varied between studies. Where meta-analysis could not be conducted, a narrative synthesis of the data was undertaken.

Assessing the body of evidence and formulating recommendations

After each included study had been assessed according to the three dimensions of evidence and relevant data extracted and summarised, this information was used to assist in the formulation of the evidence statements, and in determining the overall grade for the included studies (the 'body of evidence') that supports the evidence statements and subsequent recommendations. Recommendations are based on the highest level of evidence available. A process developed by the NHMRC for assessing the body of evidence and formulating recommendations was used to ensure consistency in the development of evidence-based recommendations. The NHMRC Evidence Statement Form for assessing the body of evidence was used to assist with the formulation of the recommendations.

Grading of the evidence

Applying evidence in real clinical situations is not usually straightforward and thus the body of evidence supporting a recommendation is rarely entirely one grade for all-important components. The grading process was designed to allow for this mixture of components while still reflecting the overall strength of the body of evidence supporting a recommendation.

The application of a grade to an evidence statement and recommendation was based on a rating of the body of evidence. The five components considered in rating the body of evidence are:

- evidence base, in terms of the number of studies, level of evidence and quality of studies (risk of bias);
- consistency of the study results;
- potential clinical impact of the proposed recommendation;
- generalisability of the body of evidence to the target population for the Guidelines; and
- applicability of the body of evidence to the Australian healthcare context.

The NHMRC Evidence Statement Form was used for each clinical question addressed in the Guidelines. Prior to completing the form, each individual study relevant to the clinical question was critically appraised and the relevant data synthesised. The form was used as the basis of discussion regarding the key components. Components were rated according to the matrix shown in Table A3.4. Any further notes relevant to developing the recommendation were also recorded in the space provided in the form. The synthesis of the evidence relating to each component was summarised. Any dissenting opinions or other relevant issues were recorded.

Table A3.4 Components of body of evidence considered when grading each recommendation

Component	A	B	C	D
	Excellent	Good	Satisfactory	Poor
Evidence base[1]	one or more level I studies with a low risk of bias or several level II studies with a low risk of bias	one or two level II studies with a low risk of bias or an SR/several level III studies with a low risk of bias	one or two level III studies with a low risk of bias, or level I or II studies with a moderate risk of bias	level IV studies, or level I to III studies/ SRs with a high risk of bias
Consistency[2]	all studies consistent	most studies consistent and inconsistency may be explained	some inconsistency reflecting genuine uncertainty around clinical question	evidence is inconsistent
Clinical impact	very large	substantial	moderate	slight or restricted
Generalisability	population/s studied in body of evidence are the same as the target population for the Guidelines	population/s studied in the body of evidence are similar to the target population for the Guidelines	population/s studied in body of evidence differ to target population for the Guidelines but it is clinically sensible to apply this evidence to target population[3]	population/s studied in body of evidence differ to target population and hard to judge whether it is sensible to generalise to target population
Applicability	directly applicable to Australian healthcare context	applicable to Australian healthcare context with few caveats	probably applicable to Australian healthcare context with some caveats	not applicable to Australian healthcare context

Notes: SR=systematic review; several=more than two studies
1 level of evidence determined from the NHMRC evidence hierarchy
2 if there is only one study, rank this component as 'not applicable'
3 e.g. results in adults that are clinically sensible to apply to children OR psychosocial outcomes for one cancer that may be applicable to patients with another type of cancer.

Source: *NHMRC Levels of Evidence and Grades for Recommendations for Developers of Guidelines* (NHMRC 2009).

Formulating and grading of recommendations

Evidence statements were developed by the assessors and refined in collaboration with the Expert Working Committee. Once the wording for the evidence statement was developed, the overall grade of the evidence statement/recommendation was determined, based on a summation of the rating for each individual component of the body of evidence.

NHMRC overall grades of recommendation are intended to indicate the strength of the body of evidence underpinning the recommendation. This should assist users of guidelines to make appropriate and informed clinical judgements. Grade A or B recommendations are generally based on a body of evidence that can be trusted to guide clinical practice, whereas Grades C or D recommendations must be applied carefully to individual clinical and organisational circumstances and should be interpreted with care.

The Expert Working Committee decided that evidence statements graded C or D would not be used to form recommendations included in the Guidelines. Evidence statements that were graded A or B were translated into a recommendation by the Expert Working Committee (all evidence statements are listed in Table A3.5). The recommendations address the original clinical questions and were written as action statements. The wording of the recommendations reflects the strength of the body of evidence.

Implementing recommendations

The implementation strategy for the Guidelines was considered at the time that recommendations were being formulated to identify supports required for their successful uptake. The questions in the implementation of recommendation section of the NHMRC Evidence Statement Form were used to achieve this purpose.

Summaries of evidence supporting recommendations

Evidence supporting Recommendation 1

Psychosocial interventions compared with usual care, wait-list or placebo for universal prevention of depression in adolescents	E	C	I	G	AP
There is evidence that psychosocial interventions are not an effective universal prevention strategy for preventing the onset of depression in adolescents although small reductions in depressive symptoms in the short term were observed.	A	B	D	A	A

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 2

Selective prevention of depression in adolescents	E	C	I	G	AP
There is evidence that family-focused interventions, given to children at risk of depression and their parent(s), are effective for reducing the frequency of newly diagnosed major depressive disorders or depressive symptoms during adolescence.	B	B	C	B	B

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 3

Indicated prevention of depression in adolescents	E	C	I	G	AP
There is insufficient evidence to recommend the use of cognitive behavioural interventions as a method of preventing the transition to major depressive disorder in adolescents with depressive symptoms.	A	B	C	A	B
There is good quality evidence that cognitive behavioural interventions may effectively reduce depressive symptoms in the short term. The benefits of cognitive behavioural interventions at 12 months after the sessions have concluded are not consistent.	A	B	C	A	B

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 4

CBT/IPT versus wait-list – effectiveness in adolescents	E	C	I	G	AP
There evidence from a large number of studies that CBT is beneficial compared to wait-list for reducing depressive symptoms and improving functioning when measured immediately post-treatment, in adolescents with depression.	A	A	C	B	C
There is evidence from a small number of studies (relative to CBT) that IPT is beneficial compared to wait-list immediately post-intervention for treating depressive symptoms and depression in adolescents with major depressive disorder.	B	A	B	C	C

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 5

Effectiveness of SSRIs compared with placebo in adolescents with major depressive disorder	E	C	I	G	AP
Fluoxetine is more effective than placebo at reducing depression and depressive symptoms and improving functioning in the short term, in adolescents diagnosed with major depressive disorder without suicidal ideation nor deemed at high risk of suicide at baseline.	A	B	C	C	C

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 6

SSRI plus CBT versus placebo	E	C	I	G	AP
There is evidence to suggest that CBT plus SSRI is superior to placebo for reducing suicidal ideation, reducing depressive symptoms and improving functioning in adolescents with major depressive disorder.	B	N/A	B	B	C

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 7

TCAs compared with placebo	E	C	I	G	AP
Tricyclic antidepressants have no effect on remission of depression or functioning, although they may have a small benefit over placebo in reducing levels of depressive symptoms.	A	B	D	C	C
Tricyclic antidepressants are associated with a higher rate of adverse events than placebo.	A	B	B	C	C

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Evidence supporting Recommendation 8

Adverse events from SSRIs[8] compared with placebo — adolescents	E	C	I	G	AP
In adolescents with major depressive disorder without suicidal thinking, nor deemed at high risk of suicide at baseline, SSRIs increase the rate of suicidal ideation or attempts compared to placebo by a factor of two to three (from a very low base rate).	A	B	C	C	C
Adverse events from antidepressants compared with placebo — young adults	**E**	**C**	**I**	**G**	**AP**
There is evidence from a large sample size of a non-statistically significant effect on increased suicidal ideation from antidepressants compared to placebo in young adults with psychiatric indications.	A	A	D	C	B
There is an increased risk of suicidal behaviour (preparatory acts, suicide attempts, or completed suicides) from antidepressants compared to placebo in young adults with psychiatric indications (including major depressive disorder). Completed suicides were a very rare event.	A	A	D	C	B

Key: E=evidence base; C=consistency; I=clinical impact; G=generalisability; AP=applicability

Table A3.5 Map of evidence statements to recommendations and narrative

Evidence statement	Grade	Rec	Section
Risk factors and protective factors			
What are the biopsychosocial risk factors and protective factors for depression in adolescents and young adults?			
Risk factors from developmental stages/inherent to child			
Females have a substantially increased risk for depression, symptoms of depression, suicidal thinking and suicide attempts during adolescence and young adulthood compared to males.	B	—	B1.1.1
The majority of the evidence reported that age was not a significant predictor of change in depressive symptoms. From those studies reporting significant results, there was relatively consistent evidence that depressive symptoms and suicide attempts are more likely to occur for the first time in younger adolescents than older adolescents for both males and females.	C	—	—
The majority of the evidence reported that ethnicity was not a significant predictor of depression or depression-related outcomes. However, there is some evidence to suggest that adolescents and young adults of a black, Hispanic or other ethnic minority in the US might have an increased risk of having depressive symptoms compared to white adolescents and young adults.	C	—	B1.1.1
The interaction between genetics and environmental risk factors influences the development of depression or depressive symptoms in adolescence and young adulthood. These environmental factors seem to be different in males and females.	C	—	B1.1.1
From the evidence it can be stated that neonatal health problems, in particular in males, are a predictive factor for major depressive disorder and depression in adolescence and young adulthood.	B	—	B1.1.1
Depression and depressive symptoms in female adolescents and young adults might be predicted by low birth weight.	B	—	B1.1.1

8 SSRIs assessed included fluoxetine, paroxetine, sertraline and citalopram

Evidence statement	Grade	Rec	Section
Incubator care in the early stage of life is a protective factor for major depressive disorder in young female adults.	B	–	B1.1.1
Depression, symptoms of depression and suicide attempts in adolescence and young adulthood can be predicted by disruptive behaviour (e.g. including conduct problems, disruptive behaviour disorders, rebelliousness, oppositional disorders, being under-controlled and showing antisocial behaviour).	B	–	B1.1.1
There is insufficient evidence that more social competence in children may be protective against depressive symptoms and suicidality in adolescence and young adulthood.	C	–	–
There is contradictory evidence that male child-parent attachment is a risk factor for major depressive disorder and depressive symptoms in adolescence and young adulthood. For females there is either no effect or a protective effect against major depressive disorder, depressive symptoms and suicide attempt.	C	–	B1.1.1
The evidence suggests that childhood sexual abuse in both males and females is a risk factor for depression, depressive symptoms, suicidal thinking and suicide attempt in adolescence and young adulthood.	C	–	B1.1.1
Childhood physical abuse predicts major depression, suicidal thinking and suicide attempt in adolescence and young adulthood.	C	–	B1.1.1
One study reported that elevated concentrations of the hormone dihydroepiandrostone (DHEA) in the early morning increases the risk of developing major depressive disorder in adolescence and young adulthood.	C	–	–
There is insufficient evidence that early pubertal timing or early pubertal development in young adolescents is associated with an increase in major depressive disorder and suicide attempts in adolescence.	C	–	–
One study suggested that same-sex sexual contact is a predictor of suicide attempt in female adolescents and young adults, but not in males.	C	–	–
Adolescents and young adults with low self-esteem are at an increased risk for developing depression, depressive symptoms or suicide attempts compared to their peers with high self-esteem. High self-esteem is a protective factor for depression, depressive symptoms or suicide attempts.	B	–	B1.1.1
The majority of evidence suggests that poor body image may be associated with a slight increase in risk for depression, depressive mood and symptoms, and suicide attempt, although a third of studies reported no association.	C	–	B1.1.1
There is contradictory evidence on the relationship between physical activity in adolescence and the risk of depressive symptoms, bipolar disorder and dysthymia in adolescence and young adulthood, so a conclusion cannot be made.	C	–	B1.1.1
Children and adolescents with a negative or high-risk cognitive style are more likely to develop a major depressive disorder, dysthymia and depressive symptoms in adolescence and young adulthood compared to their peers with a positive or low-risk cognitive style.	C	–	B1.1.1
Adolescents and young adults with a high number of ego resilience traits (confident optimism, productive activity, insight, warmth and skilled expressiveness) have moderately decreased odds for depressive symptoms compared to those with no ego resilience traits.	C	–	B1.1.1
Children and adolescents with a positive attribution style are slightly less likely to develop depressive symptoms in adolescence and young adulthood compared to their peers with a negative attribution style.	C	–	B1.1.1

Evidence statement	Grade	Rec	Section
There is conflicting evidence regarding whether poor school performance significantly increases the risk for major depressive episodes and dysthymia, depression, depressive symptoms and depressive mood in adolescence and young adulthood.	C	–	B1.1.1
There is insufficient evidence to suggest that adolescents who are overweight or obese (high BMI) are more vulnerable to developing depressive symptoms and depressive mood in adolescence and young adulthood.	C	–	–
There is contradictory evidence regarding whether eating disorders and symptoms of eating disorders predict depression and depressive symptoms in female adolescents and young adults.	C	–	B1.1.1
One study reported no significant relationship between dietary restraint and the development of depression.	C	–	–
The evidence suggests that extreme dieting may possibly predict depressive symptoms, suicide attempt and suicide ideation in female adolescents and young adults.	C	–	B1.1.1
There is evidence for low quality relationships as a predictor and high quality relationships as a protector in the development of major depressive disorder, depression, depressive symptoms, suicidal thinking and suicide attempt in adolescence and young adulthood.	B	–	B1.1.1
There is contradictory evidence for romantic involvement as a predictor for the development of depressive symptoms and suicide attempt in adolescence and young adulthood.	C	–	B1.1.1
The evidence suggests that adolescents who experience health problems (other than psychological problems), or perceive their health as poor, are more likely to develop major depressive disorder, depressive symptoms and suicidal thinking in adolescence and young adulthood.	C	–	B1.1.1
The evidence suggests that sleeping problems might be a predictor for major depressive disorder, depression or symptoms of depression in adolescence.	B	–	B1.1.1
Adolescents with either the presence of retardation or of sleep difficulties might have an increase in risk for major depressive disorder in late adolescence, while it is possible that adolescents with both risk factors do not.	C	–	B1.1.1
The existence of mental disorders in adolescents increases the likelihood of developing major depressive disorder, depression and depressive symptoms in adolescence and young adulthood.	B	–	B1.1.1
Adolescents with a history of suicide attempts are more likely to be diagnosed with depression, attempt suicide and have suicidal thinking in adolescence and young adulthood.	B	–	B1.1.1
The evidence indicates that suicidal thinking in adolescents is a predictor of major depression, suicidal thinking and suicide attempt later in adolescence and during young adulthood.	B	–	B1.1.1
Childhood and adolescent depressive symptoms is a good predictor of clinical depression, depressive symptoms, suicide attempts and suicidal thinking in adolescence and young adulthood.	B	–	B1.1.1
The evidence suggests that internalising problems can predict the development of depressive symptoms and suicide attempt in adolescence and young adulthood.	C	–	B1.1.1

Evidence statement	Grade	Rec	Section
Internalised anger in adolescence might be a predictor for future symptoms of depression in young adulthood, particularly in females.	C	–	B1.1.1
The evidence suggests that hypomanic behaviour can predict hypomania in adolescence and young adulthood, while mania increases the risk of developing a major depressive disorder.	C	–	B1.1.1
The evidence indicates that adolescents exposed to a completed suicide or suicide attempt of a friend or family member have a substantial risk for the development of major depressive disorder and their own suicide attempt in adolescence and young adulthood.	B	–	B1.1.1
There is evidence to suggest that females who experience the loss of a parent may have an increased risk of becoming depressed and developing depressive symptoms in adolescence and young adulthood compared to peers who have not experienced such a loss. Death of a parent is not a risk factor for depression in males.	C	–	B1.1.1
The evidence suggests that adolescent sexual abuse in females is a risk factor for short-term depressive symptoms in adolescence and young adulthood.	C	–	B1.1.1
Major depressive disorder, depression, depressive symptoms and suicidality in adolescence and young adulthood might be possibly related to substance misuse, although there was some contradictory evidence.	C	–	B1.1.1
The evidence regarding smoking as a risk factor for major depressive disorder and depressive symptoms in adolescence and young adulthood is inconclusive.	C	–	B1.1.1
There is insufficient evidence to suggest that alcohol misuse increases the risk of depressive symptoms and the development of major depressive disorder in adolescence and young adulthood.	C	–	–
The evidence suggests that cannabis use might predict the development of depressive symptoms, suicidal thinking and suicide attempt in adolescence and young adulthood, particularly in those of younger age or in females.	C	–	B1.1.1
The evidence on drug use (other than cannabis) as a risk factor for development of depressive symptoms, suicidal thinking and suicide attempt in adolescence and young adulthood was too limited and inconsistent to make conclusions.	C	–	B1.1.1
From the evidence it can be stated that teenage pregnancy might be a predictive factor for major depressive disorder and long term depressive symptoms in female adolescents and young adults, while among those who become pregnant, the pregnancy being unintended is not in itself a significant predictor of depression.	C	–	B1.1.1
There is insufficient evidence regarding having problems with the law as a risk factor for depressive symptoms in adolescence and young adulthood.	C	–	–
The evidence suggests that stressful negative life events, such as family conflict, loss of a friend or relative and traumatic experiences, are predictive factors for depression, depressive symptoms and suicidal thinking in adolescence and young adulthood.	B	–	B1.1.1
Adolescents and young adults with high levels of neuroticism or psychoticism have a moderately increased risk for depressive symptoms compared to those with low level neuroticism or psychoticism.	C	–	B1.1.1
Affect instability or poor emotional control in childhood is a slight to moderate predictor of depressive symptoms and single suicide attempt in adolescence.	C	–	B1.1.1

Evidence statement	Grade	Rec	Section
Although there is some contradictory evidence, it appears that children and adolescents with anxiety are more likely to develop major depressive disorder or depressive symptoms in adolescence and young adulthood compared to their peers without anxiety. There is insufficient evidence to explain the relationship between anxiety and suicide attempts.	C	–	B1.1.1
Risk with systemic origins			
The occurrence of psychopathology in parents increases the risk of major depressive disorder, depression and depressive symptoms in adolescent and young adult offspring.	A	–	B1.1.1
There is some evidence that parental divorce may be a predictor of symptoms of depression in adolescents.	C	–	B1.1.1
Parental divorce does not appear to be a risk factor for depression or suicidal ideation or attempts.	C	–	
There is insufficient evidence to suggest that having a parent with a high education level decreases the risk for depressive symptoms in adolescence and young adulthood.	C	–	–
The majority of the evidence indicates that parental support is a protective factor for the development of major depressive disorder, depression, depressive symptoms, depressive mood, and suicidality in adolescence and young adulthood; however, there is some inconsistent evidence for family support as a predictor of major depressive disorder and suicide attempts.	B	–	B1.1.1
The evidence was inconsistent regarding whether negative parenting style, like harsh child rearing and independence is a significant risk factor for major and minor depression, depressive symptoms and suicide attempt in adolescence and young adulthood.	C	–	B1.1.1
There is inconsistent evidence regarding family functioning as a risk factor for the development of major depressive disorder, depressive symptoms, depressed mood and suicidal thought in adolescence and young adulthood.	C	–	B1.1.1
There is contradictory evidence that being female, being born later than other siblings, being part of a large family, and having an older mother was related to higher rates of major depressive disorder, depression and suicidal thinking in adolescents and young adults. In males, having a parent remarry is a predictive factor of major depressive disorder.	C	–	B1.1.1
Adolescents and young adults with a poor perception of their family role have an increased risk for major depressive disorder and depression, in particular for males.	C	–	B1.1.1
There is inconsistent evidence regarding whether socioeconomic status is an independent risk factor for depression or depressive symptoms.	C	–	B1.1.1
One study reported that a mother's perceived role satisfaction as a mother is associated with depressive symptoms in female adolescents and young adults.	C	–	–
Adolescents residing with fewer than two of their biological parents have an increased risk of depression and depressive symptoms in adolescence and young adulthood.	C	–	B1.1.1
There is evidence to suggest that adolescents who have a delinquent family member or affiliates with a delinquent peer have an increased risk for depressive symptoms in adolescence and young adulthood, although this finding was not always significant across studies.	C	–	B1.1.1

Evidence statement	Grade	Rec	Section
One study suggests that small school size is associated with depressive symptoms and suicide attempt in male adolescents and young adults.	C	–	–
One study reported that grade segregated school systems might increase the risk for depressive symptoms and depressive mood in adolescence and young adulthood.	C	–	–
Interacting risk factors for both adolescents and young adults			
There is contradictory evidence regarding whether negative attribution style in adolescents experiencing stress predicts major depressive disorder and depressive symptoms in adolescence and young adulthood.	C	–	–
The evidence suggests that negative attribution style in adolescents experiencing stress predicts major depressive disorder regardless of self-esteem level, while negative attribution style coupled with low self-esteem in adolescents experiencing stress predicts depressive symptoms in adolescence and young adulthood.	C	–	–
The evidence suggests that high depressive affect in adolescents with a friend who attempted suicide is a protective factor for suicide attempt in male adolescents and young adults.	C	–	–
Children with a negative problem-solving orientation who experienced a negative life event are more likely to develop depressive symptoms in early adolescence than their peers with a positive problem-solving orientation and experience of a negative life event.	C	–	–
In children who have depressive symptoms, those whose behaviour undermines peer autonomy and relatedness are more likely to have depressive symptoms in early adolescence than those with respect for peer autonomy and relatedness.	C	–	–
Adolescents with either the presence of thinking difficulties or presence of fatigue might have an increase in risk for major depressive disorder in late adolescence, while adolescents with both risk factors do not.	C	–	–
Primary caregivers' inductive reasoning might be a protective factor for depressive symptoms in young adolescents who live in more disordered neighbourhoods, compared to those living in less disordered neighbourhoods.	C	–	–
Mediator factors for both adolescents and young adults			
Rumination might be a mediating factor in the relationship between negative cognitive style, self-criticism, neediness and number of past major depressive episodes, and future prospective major depressive episodes in adolescence and young adulthood.	C	–	–
High cognitive risk in childhood might be a mediator between mother and father negative feedback style and depression in young adulthood.	C	–	–
A child's perceived stress burden is possibly a mediator between early childhood adversities and depression in adolescence and young adulthood.	C	–	–
Parental rejection may be a mediator in the relationship between childhood harsh parenting and depressive symptoms in adolescence and young adulthood.	C	–	–
Dieting may be a mediating factor between body dissatisfaction and depressive symptoms in female adolescents and young adults.	C	–	–
Poor family relations may be a mediator between living in a single parent household and having a depressive mood in adolescence and young adulthood.	C	–	–

Evidence statement	Grade	Rec	Section
Financial problems may be a mediator between living in a single parent household and having a depressive mood in adolescence and young adulthood.	C	–	–
Negative life events may be a mediator between living in a single parent household and having a depressive mood in adolescence and young adulthood.	C	–	–
Prevention			
What are the benefits, harms/side-effects and cost-effectiveness of prevention strategies for depression in adolescents and young adults?			
Universal prevention strategies in adolescents			
There is evidence that psychosocial interventions are not an effective universal prevention strategy for preventing the onset of depression in adolescents, although small reductions in depressive symptoms in the short term were observed.	A	1	B2.2.1
There is insufficient evidence to recommend one form of psychosocial intervention over another, to reduce depressive symptoms in adolescents.	B	–	B2.2.1
There is insufficient evidence on which to make a recommendation regarding parent training as a universal prevention strategy. However, one study has reported a positive outcome on reducing depressive symptoms in adolescence.	C	–	B2.2.1
Universal prevention strategies in young adults			
There is insufficient evidence to recommend the use of home-based counselling of parents over the first 5 years of a child's life, as a means of preventing depression in young adults.	D	–	B2.3.1
There is insufficient evidence to recommend the use of classroom behaviour management programs as a universal prevention strategy for depression in young adults.	C	–	B2.3.1
There is insufficient evidence on which to draw conclusions about the long-term effectiveness of psychosocial interventions for preventing major depressive disorders in the young adult population.	C	–	B2.3.1
There is limited evidence suggesting that relationship functioning and academic functioning may be improved by psychosocial interventions compared to psychoeducation or routine orientation.	C	–	B2.3.1
There is evidence suggesting that transition training that is only indirectly related to depression (such as a school-to-work intervention) is not effective at reducing depressive symptoms, but may assist functioning in the targeted areas.	C	–	B2.3.1
There is insufficient evidence to recommend the use of meditation to prevent depression in young adults.	D	–	B2.3.1
There is some evidence to suggest that in healthy young adults, multivitamins or B-complex vitamins are no more effective at reducing depressive symptoms than placebo.	C	–	B2.3.1

Evidence statement	Grade	Rec	Section
Selective prevention strategies in children and adolescents			
The evidence regarding psychosocial interventions for those adolescents at risk of or currently having dropped out of school, is too inconsistent to base a recommendation on, although Counselors Care, and Coping and Support Training show promise in being able to reduce depressive symptoms and suicidal ideation in the short term. There was no evidence on their ability to prevent clinical depression.	C	–	B2.2.2
The evidence is inconclusive and it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no intervention in adolescents with diabetes as a risk factor for depression.	C	–	B2.2.2
The evidence is inconclusive and it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no intervention in adolescents with ethnic minority status and low socioeconomic status as risk factors.	D	–	B2.2.2
The evidence is inconclusive and it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no intervention in adolescents with personality risk factors for psychopathy.	C	–	B2.2.2
The evidence is inconclusive and it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no intervention in male adolescents residing in a shelter.	D	–	B2.2.2
There is evidence that family-focused interventions, given to the child at risk of depression and their parent(s), are effective for reducing the frequency of newly diagnosed major depressive disorder or depressive symptoms during adolescence.	B	2	B2.2.2
There is insufficient evidence on a dialectical behaviour therapy skills training group to recommend its use as a selective prevention strategy in adolescents at risk of depression.	D	–	B2.2.2
There is limited evidence suggesting that moderate exercise levels and high exercise levels had a similar impact on depressive symptoms in adolescents at risk of depression.	C	–	B2.2.2
Selective prevention strategies in young adults			
There is limited evidence supporting the use of educational child care from birth to 5 years, as a means of preventing depression in young adults.	D	–	B2.3.2
The evidence is inconclusive and it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no interventions in young adults with a pessimistic attributional style.	C	–	B2.3.2
While there is a trend in the evidence towards supporting the use of psychosocial interventions to reduce depressive symptoms in the short term in young adults with body dissatisfaction, the evidence is currently inconclusive and so it is not possible to determine whether there is a clinically important difference between psychosocial interventions and wait-list control groups.	C	–	B2.3.2
The evidence is currently inconclusive and so it is not possible to determine whether there is a clinically important difference between psychosocial interventions and no intervention in incarcerated young adults who are suicidal, under formal protection or being bullied.	C	–	B2.3.2
There is limited evidence suggesting that emotionally disclosive writing, or writing about the 'best possible self' are ineffective means of reducing depressive symptoms in young adults at risk of developing depression.	C	–	B2.3.2

Evidence statement	Grade	Rec	Section
Indicated prevention strategies in children and adolescents			
There is insufficient evidence to recommend the use of cognitive behavioural interventions as a method of preventing the transition to major depressive disorder in adolescents with depressive symptoms. There is good quality evidence that cognitive behavioural interventions may effectively reduce depressive symptoms in the short term. The benefits of cognitive behavioural interventions at 12 months after the sessions have concluded are not consistent.	**B**	**3**	B2.2.3
There is evidence from one study favouring IPT over counselling as a means of reducing depressive symptoms and improving quality of life in adolescents. There is evidence suggesting that IPT may also be effective at preventing the transition to a major depressive episode, but longer term effects are not yet determined, and more research is needed to replicate the findings.	**C**	**–**	B2.2.3
Very limited evidence suggests that bibliotherapy is more effective than a wait-list condition at reducing depressive symptoms in the short term.	**C**	**–**	B2.2.3
Indicated prevention strategies in young adults			
While there is evidence that cognitive behavioural interventions reduce depressive symptoms, compared to no intervention, in the short term (up to 6 months) in students, there is no evidence that it reduces depressive symptoms in the long term or prevents depressive episodes.	**C**	**–**	B2.3.3
There is limited evidence favouring IPT over a wait-list control group for reducing depressive symptoms in the short term.	**C**	**–**	B2.3.3
There is insufficient evidence to recommend the use of adventure-based therapy as indicated for prevention of depression in young adults.	**D**	**–**	B2.3.3
Very limited evidence suggests that regular group exercise (e.g. jogging or yoga) is an effective means of reducing depressive symptoms in the short term in young adults with depressive symptoms, although there is no evidence of its effectiveness in the long term or its ability to prevent the transition to depression.	**C**	**–**	B2.3.3
Psychosocial and physical therapies			
What are the benefits, harms/side-effects and cost-effectiveness of management strategies/ psychological or physical treatments for depression in adolescents and young adults?			
For treating depression in adolescents			
There is evidence from a large number of studies that CBT is beneficial compared to wait-list for reducing depressive symptoms and improving functioning when measured immediately post-treatment, in adolescents with depression.	**B**	**4**	C3.2.1
One study reported no significant benefit from the addition of group CBT to usual care within a Health Maintenance Organization at improving functioning or reducing depressive symptoms.	**C**	**–**	C3.2.1
One study reported no significant differences between the effectiveness of CBT and a pill placebo at reducing rates of depression, reducing depressive symptoms and improving functioning in adolescents with depression.	**C**	**–**	C3.2.1
One small study reported that there is a trend towards IPT being more effective in the short term than CBT at reducing depressive symptoms and improving functioning in adolescents with major depressive disorder.	**C**	**–**	C3.2.1

Evidence statement	Grade	Rec	Section
There is insufficient evidence on which to base recommendations on the use of booster sessions of CBT in adolescents with major depressive disorder.	C	–	C3.2.1
One study provided results suggesting that CBT is superior to systemic-behavioural family therapy (SBFT) and non-directive supportive therapy (NST), resulting in a quicker reduction in depressive symptoms in adolescents with major depressive disorder. Sustained long-term benefit of CBT over other therapies has not been established. The benefit of CBT over SBFT and NST for improving functioning is inconclusive.	C	–	–
There is evidence to suggest that CBT is superior to life skills training in the short term, for remitting depression, possibly at reducing depressive symptoms and improving functioning in highly disordered adolescents with comorbid major depressive disorder and conduct disorder. The benefits identified were not sustained to the 6 and 12 months follow-up, when the life skills group had achieved similar improvements.	C	–	C3.2.1
CBT was found to be superior to relaxation therapy in the short term (immediately post-treatment and at 3 months follow-up) for increasing the rates of remission from depression, reducing depressive symptoms and improving functioning, however the difference in these benefits was not sustained to the 6-month follow-up.	C	–	C3.2.1
There is evidence from a small number of studies (relative to CBT) that IPT is beneficial compared to wait-list immediately post-treatment for treating depressive symptoms and depression in adolescents with major depressive disorder.	B	4	C3.2.1
One study reported that IPT provides clinically important benefits in reducing depressive symptoms and improving functioning in adolescents with major depressive disorder, when compared to usual care, immediately post-treatment.	C	–	C3.2.1
There is one study to suggest that a family intervention is superior to wait-list in improving family functioning and reducing depressive symptoms.	C	–	C3.2.1
There is insufficient evidence on which to base a recommendation on the addition of family psychoeducation to usual care for adolescents with major depressive disorder.	C	–	C3.2.1
There is insufficient evidence to support the use of a therapeutic support group in favour of a social skills group for reducing rates of clinical depression or depressive symptoms in adolescents with major depressive disorder.	C	–	C3.2.1
For treating depression in young adults			
There is evidence to suggest that CBT is superior to usual care or wait-list for reducing depressive symptoms and reducing suicidal ideation for young adults with major depressive disorder.	C	–	C3.2.1
There is evidence to suggest that yoga is superior to no treatment in reducing depressive symptoms and the remission of depression for young female adults with major depressive disorder.	C	–	C3.1.1
There is evidence to suggest that bright light therapy has benefits for reducing symptoms of depression and remittance from depression, however the benefits are likely to be of limited significance in the Australian healthcare context.	D	–	C3.1.1

Evidence statement	Grade	Rec	Section
For treating bipolar depression in adolescents and young adults			
ECT is associated with less time spent in hospital after an acute episode of depression or mania but is also associated with a high rate of short-term adverse events. The long-term impact of ECT was not reported.	**C**	**–**	–
One study suggests that family-focused therapy is superior to enhanced care in providing a speedier recovery from an acute episode of depression or mania and prolonging the time spent in remission.	**C**	**–**	C4.4.2
Pharmacological treatments			
What are the benefits, harms/side-effects and cost-effectiveness of pharmacological interventions for depression in adolescents and young adults?			
For treating depression in adolescents			
Fluoxetine is more effective than placebo at reducing depression and depressive symptoms and improving functioning in the short term, in adolescents diagnosed with major depressive disorder without suicidal ideation nor deemed at high risk of suicide at baseline.	**B**	**5**	C3.3.1
The published evidence on paroxetine reported that it is more effective than placebo at reducing depression and depressive symptoms in adolescents diagnosed with major depressive disorder, however, conclusions cannot be made on the basis of the published evidence, due to the presence of selective reporting and publication bias.	**B**	**–**	C3.3.1
Sertraline was statistically superior to placebo at improving quality of life, functioning and reducing depressive symptoms, although the full range of estimates often included clinically unimportant effects.	**C**	**–**	C3.3.1
There was insufficient evidence on citalopram or escitalopram on which to base recommendations regarding their effectiveness.	**C**	**–**	C3.3.1
SSRIs[9] are associated with a higher risk of side effects and adverse events than placebo in adolescents being treated for major depressive disorder.	**B**	**–**	C3.3.1
In adolescents with major depressive disorder without suicidal ideation nor deemed at high risk of suicide at baseline, SSRIs increase the rate of suicidal ideation or attempts compared to placebo by a factor of two to three (from a very low base rate). No completed suicides were reported.	**B**	**8**	C3.3.1
The evidence is inconclusive and so it is not possible to determine whether there is a clinically important difference between fluoxetine and placebo as maintenance therapy in those with remission of depressive symptoms.	**D**	**–**	C3.3.1
Limited evidence showed a trend towards favouring SSRIs over tricyclic antidepressants, with higher rates of remission of depression, greater functioning on some outcome measures. However, on the whole, the evidence is inconclusive regarding whether the differences between types of antidepressants are clinically important.	**C**	**–**	C3.3.1
The rates of adverse events were high after both SSRIs and tricyclic antidepressants, although higher from tricyclics.	**C**	**–**	C3.3.1
In adolescents who have failed to respond to one type of SSRI, there is one study that provides evidence to suggest that trying another form of SSRI (with/without CBT), or switching to a selective serotonin and noradrenergic reuptake inhibitor (with/without CBT) are equally effective and safe options.	**C**	**–**	C3.3.1

9 SSRIs assessed included fluoxetine, paroxetine, sertraline and citalopram

Evidence statement	Grade	Rec	Section
There is insufficient evidence comparing two doses of fluoxetine in previous non-responders to fluoxetine on which to base any recommendations.	D	–	C3.3.1
Limited evidence suggests there is unlikely to be a clinically important difference between venlafaxine ER and placebo in their ability to reduce depressive symptoms in adolescents with major depression. Venlafaxine ER is associated with higher levels of adverse events than placebo.	D	–	C3.3.1
Tricyclic antidepressants have no effect on remission of depression or functioning, although they may have a small benefit over placebo in reducing levels of depressive symptoms.	B	7	C3.3.1
Tricyclic antidepressants are associated with a higher rate of adverse events than placebo.	B	7	C3.3.1
There is insufficient evidence on which to base recommendations comparing monoamine oxidase A and placebo.	D	–	C3.3.1
For treating depression in young adults			
There is evidence favouring SSRIs over tricyclic antidepressants as a means of reducing depressive symptoms in young adults.	C	–	C3.3.1
There is evidence from a large sample size of a non-statistically significant effect on increased suicidal ideation from antidepressants compared to placebo in young adults with psychiatric indications.	B	8	C3.3.4
There is an increased risk of suicidal behaviour (preparatory acts, suicide attempts, or completed suicides) from antidepressants compared to placebo in young adults with psychiatric indications (including major depressive disorder). Completed suicides were a very rare event.	B	8	C3.3.4
For treating bipolar depression in adolescents			
The evidence is inconclusive and so it is not possible to determine whether there is a clinically important difference between anticonvulsants and placebo in adolescents with bipolar disorder experiencing a manic or mixed episode.	C	–	C5.1.2
The evidence from one study was inconclusive and so it is not possible to determine whether there is a clinically important difference between anticonvulsants and atypical antipsychotics in adolescents with bipolar disorder, experiencing a manic or mixed episode. However, of those findings that were significant, quetiapine was favoured over divalproex.	C	–	C5.1.2
There is one small study favouring the addition of atypical antipsychotics over anticonvulsants to reduce mania symptoms in adolescents with bipolar disorder.	C	–	C5.1.2
There is one study favouring atypical antipsychotics over placebo as a means of reducing mania symptoms and improving functioning in adolescents with bipolar disorder during either mixed or manic episodes.	C	–	C5.1.2
There is one small study favouring lithium over placebo as a means of treating bipolar disorder and substance dependency disorder in adolescents, where the two co-exist.	C	–	C5.1.2
One study suggests that there is unlikely to be a clinically significant difference between lithium and placebo as maintenance treatment, in adolescents with bipolar disorder, who respond to lithium to treat a manic episode.	C	–	C5.1.2

Evidence statement	Grade	Rec	Section
The evidence is inconclusive and so it is not possible to determine whether there is a clinically important difference between Siberian ginseng and fluoxetine as adjunctive treatments to lithium, in adolescents with bipolar disorder, experiencing a major depressive episode.	D	–	C5.1.2
For treating bipolar depression in young adults			
No studies were identified meeting the pre-specified inclusion criteria assessing pharmacological treatment to treat bipolar disorder in young adults.	–	–	–
Combined therapies			
What are the benefits, harms/side-effects and cost-effectiveness of pharmacological interventions for depression in adolescents and young adults? What are the benefits, harms/side-effects and cost-effectiveness of management strategies/ psychological or physical treatments for depression in adolescents and young adults?			
SSRIs and CBT were both effective at improving functioning and reducing depression and depressive symptoms in adolescents with major depressive disorder. One study favoured fluoxetine over CBT, while another favoured CBT over sertraline for reducing rates of depression, and depressive symptoms and improving functioning in the short term. CBT had fewer adverse events than SSRIs.	C	–	C3.3.1
Family income level and baseline levels of depression severity were found to moderate the treatment effectiveness of fluoxetine and CBT. Those with low levels of family income had greater reductions in depressive symptoms from fluoxetine than CBT, whereas there was no significant difference between conditions in participants with high levels of family income.	C	–	C3.3.1
Those with high levels of baseline severity had greater reductions in depressive symptoms from fluoxetine than CBT, whereas there was no significant difference between conditions in participants with low levels of depression severity.	C	–	C3.3.1
The evidence reported no significant difference in the effectiveness of combination CBT and SSRI treatment compared to SSRI treatment alone at improving functioning or reducing depressive symptoms in adolescents with major depressive disorders or dysthymia. There was inconsistent evidence regarding whether CBT plus SSRIs reduced the rate of depression to a statistically significant degree, compared to SSRI treatment alone.	C	–	C3.3.1
One study reported no significant differences on rates of recovery, levels of functioning or depressive symptoms in adolescents with major depressive disorders, receiving SSRIs with or without sequentially added CBT.	C	–	C3.3.1
One small study reported that sequentially adding CBT to SSRIs in proven responders to SSRIs may reduce the risk of relapse, however, there was no significant difference in levels of depressive symptoms and functioning compared to those who received SSRI treatment alone.	C	–	C3.3.1
In adolescents who have failed to respond to one type of SSRI, there is one study that provides evidence that trying another form of SSRI, or switching to a selective serotonin and noradrenergic reuptake inhibitor in combination with CBT results in marginally better outcomes than switching medication without the addition of CBT, although the difference was not always statistically or clinically significant.	C	–	C3.3.1
There is evidence to suggest that CBT plus SSRI is superior to placebo for reducing suicidal ideation, reducing depressive symptoms and improving functioning in adolescents with major depressive disorder.	B	6	C3.3.1

Evidence statement	Grade	Rec	Section
One study reported that CBT plus fluoxetine was clinically superior to CBT alone at reducing rates of depression and depressive symptoms and improving functioning immediately post-treatment in adolescents with major depressive disorder or dysthymia. CBT plus fluoxetine was not significantly different to CBT alone in the longer term.	C	–	C3.3.1
Prognosis			
How do biopsychosocial risk factors and protective factors impact upon the course of depression and outcomes in young adults and adolescents?			
Recurrence of depressive disorder and depression in adolescence and young adulthood is more likely in females than males, although there is some inconsistency in the evidence on the statistical significance of this relationship.	B	–	C4.3
There is inconsistent evidence regarding the impact that age of onset has on the prognosis of depression.	C	–	–
One study reported that in adolescents who have had an episode of depression in the past 12 months, a high degree of suicidal ideation/behaviour may predict an increased risk of suicide during adolescence and young adulthood, although evidence was found that a previous suicide attempt was not an independent predictor of major depressive disorder recurrence in young adulthood.	C	–	–
Adolescents and young adults with major or minor depressive disorders have better prognostic outcomes if they are younger at the age of onset, have had fewer previous depressive episodes, have a minor depressive disorder rather than major depressive disorder, have a shorter depressive episode, have lower severity of depressive symptoms, and no significant depressed mood.	B	–	C4.3
The presence of an Axis II diagnosis (personality disorders or intellectual disability) or a high level of borderline or antisocial personality disorder symptoms, in current or formerly depressed adolescents increases the risk for recurrent major depressive disorder and depression.	B	–	C4.3
Adolescents with a current depressive mood disorder and a little or no functional impairment have a shorter time to recovery, compared to those with moderate to high impairment.	C	–	–
The evidence is currently contradictory regarding whether a comorbid anxiety disorder negatively affects the prognosis of a major depressive disorder.	C	–	C4.3
Strong and frequent feelings of anger in adolescents with a past depressive disorder episode might indicate increased vulnerability to a suicide attempt when compared to similar adolescents without strong feelings of anger.	C	–	C4.3
There is insufficient evidence on substance use as a prognostic factor for depression to make any conclusions.	C	–	C4.3
Formerly depressed adolescents with a family history of recurrent depressive disorder are highly vulnerable to also developing recurrent major depressive disorder in adolescence and young adulthood.	C	–	C4.3
Formerly depressed adolescents without a family history of recurrent depressive disorder are more likely to stay well in adolescence and young adulthood, compared to those with a family history of recurrent depressive disorder.	C	–	–
Adolescents suffering from a major depressive disorder who devalue themselves or have a negative self-view are more likely to have persistent major depression than those with a more positive self-image.	C	–	–

Evidence statement	Grade	Rec	Section
Currently depressed adolescents with low perceived social support might be at a slightly higher risk of recurrence of a major depressive episode compared to those with high perceived social support.	C	–	–
Currently depressed adolescents who experienced harsh parenting are at twice the risk of major depressive episode recurrence compared to those adolescents who did not experience harsh parenting.	C	–	–
One study reported that levels of depressive symptoms in those receiving fluoxetine, CBT, fluoxetine plus CBT or placebo were slightly lower in those who receive treatment at a younger age, who had a shorter duration of major depressive disorder, with less severe symptoms, greater baseline functioning, less suicidal ideation, fewer melancholic features, fewer comorbid diagnoses, less hopelessness, and greater treatment expectancy.	C	–	–
In adolescents receiving CBT, remission over the course of treatment is more likely in those of younger current age with better social functioning. Depressive symptoms are likely to reduce to a greater degree in those with low baseline levels of symptoms, with parental involvement, and a younger age of onset.	C	–	–
One study reported that seeking treatment via an advertisement rather than clinical referral and having low levels of depressive symptoms at baseline strongly predicted a good prognosis from CBT, systemic-behavioural family therapy or supportive therapy.	C	–	–
In adolescents receiving life skills tutoring or CBT, high levels of problem behaviour or suicidal ideation at baseline strongly predict a longer time to recovery.	C	–	–

4 DSM-IV-TR criteria and ICD-10 categories

DSM-IV-TR criteria[10]

Mood episodes

Criteria for Major Depressive Episode

A Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g. feels sad or empty) or observation made by others (e.g. appears tearful). **Note:** In children and adolescents, can be irritable mood.
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others).
3. Significant weight loss when not dieting or weight gain (e.g. a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. **Note:** In children, consider failure to make expected weight gains.
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B The symptoms do not meet criteria for a Mixed Episode (see Criteria for Mixed Episode).

C The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition (e.g. hypothyroidism).

E The symptoms are not better accounted for by Bereavement (i.e. after the loss of a loved one), the symptoms persist for longer than 2 months or are characterised by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

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Criteria for Manic Episode

A A distinct period of abnormally and persistently elevated, expansive, or irritable mood lasting at least 1 week (or any duration if hospitalisation is necessary).

B During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:

1. inflated self-esteem or grandiosity;
2. decreased need for sleep (e.g. feels rested after only 3 hours of sleep);
3. more talkative than usual or pressure to keep talking;
4. flight of ideas or subjective experience that thoughts are racing;
5. distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli);
6. increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation;
7. excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g. engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

C The symptoms do not meet criteria for a Mixed Episode (see Criteria for Mixed Episode).

D The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalisation to prevent harm to self or others, or there are psychotic features.

E The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism).

Criteria for Hypomanic Episode

A A distinct period of persistently elevated, expansive, or irritable mood, lasting throughout at least 4 days, that is clearly different from the usual non-depressed mood.

B During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:

1. inflated self-esteem or grandiosity;
2. decreased need for sleep (e.g. feels rested after only 3 hours of sleep);
3. more talkative than usual or pressure to keep talking;
4. flight of ideas or subjective experience that thoughts are racing;
5. distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli);
6. increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation;
7. excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g. the person engages in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

C The episode is associated with an unequivocal change in functioning that is uncharacteristic of the person when not symptomatic.

D The disturbance in mood and the change in functioning are observable by others.

E The episode is not severe enough to cause marked impairment in social or occupational functioning, or to necessitate hospitalisation, and there are no psychotic features.

F The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism).

Criteria for Mixed Episode

A The criteria are met both for a Manic Episode (see Criteria for Manic Episode) and for a Major Depressive Episode (see Criteria for Major Depressive Episode) (except for duration) nearly every day during at least a 1-week period.

B The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalisation to prevent harm to self or others, or there are psychotic features.

C The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism).

Diagnostic criteria for 300.4 Dysthymic Disorder

A Depressed mood for most of the day, for more days than not, as indicated either by subjective account or observation by others, for at least 2 years. Note: In children and adolescents, mood can be irritable and duration must be at least 1 year.

B Presence, while depressed, of two (or more) of the following:

1. poor appetite or overeating
2. insomnia or hypersomnia
3. low energy or fatigue
4. low self-esteem
5. poor concentration or difficulty making decisions
6. feelings of hopelessness.

C During the 2-year period (1 year for children or adolescents) of the disturbance, the person has never been without the symptoms in Criteria A and B for more than 2 months at a time.

D No Major Depressive Episode (see Criteria for Major Depressive Episode) has been present during the first 2 years of the disturbance (1 year for children and adolescents); i.e. the disturbance is not better accounted for by chronic Major Depressive Disorder, or Major Depressive Disorder, In Partial Remission. Note: There may have been a previous Major Depressive Episode provided there was a full remission (no significant signs or symptoms for 2 months) before development of the Dysthymic Disorder. In addition, after the initial 2 years (1 year in children or adolescents) of Dysthymic Disorder, there may be superimposed episodes of Major Depressive Disorder, in which case both diagnoses may be given when the criteria are met for a Major Depressive Episode.

E There has never been a Manic Episode (see Criteria for Manic Episode), a Mixed Episode (see Criteria for Mixed Episode), or a Hypomanic Episode (see Criteria for Hypomanic Episode), and criteria have never been met for Cyclothymic Disorder.

F The disturbance does not occur exclusively during the course of a chronic Psychotic Disorder, such as Schizophrenia or Delusional Disorder.

G The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition (e.g. hypothyroidism).

H The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Diagnostic criteria for 296.2x Major Depressive Disorder, Single Episode

A Presence of a single Major Depressive Episode (see Criteria for Major Depressive Episode).

B The Major Depressive Episode is not better accounted for by Schizoaffective Disorder and is not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

C There has never been a Manic Episode (see Criteria for Manic Episode), a Mixed Episode (see Criteria for Mixed Episode), or a Hypomanic Episode (see Criteria for Hypomanic Episode). Note: This exclusion does not apply if all of the manic-like, mixed-like, or hypomanic-like episodes are substance or treatment induced or are due to the direct physiological effects of a general medical condition.

Diagnostic criteria for 296.3x Major Depressive Disorder, Recurrent

A Presence of two or more Major Depressive Episodes (see Criteria for Major Depressive Episode). Note: To be considered separate episodes, there must be an interval of at least 2 consecutive months in which criteria are not met for a Major Depressive Episode.

B The Major Depressive Episodes are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

C There has never been a Manic Episode (see Criteria for Manic Episode), a Mixed Episode (see Criteria for Mixed Episode), or a Hypomanic Episode (see Criteria for Hypomanic Episode). Note: This exclusion does not apply if all of the manic-like, mixed-like, or hypomanic-like episodes are substance or treatment induced or are due to the direct physiological effects of a general medical condition.

Diagnostic criteria for 296.0x Bipolar I Disorder, Single Manic Episode

A Presence of only one Manic Episode (see Criteria for Manic Episode) and no past Major Depressive Episodes. Note: Recurrence is defined as either a change in polarity from depression or an interval of at least 2 months without manic symptoms.

B The Manic Episode is not better accounted for by Schizoaffective Disorder and is not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

Diagnostic criteria for 296.40 Bipolar I Disorder, Most Recent Episode Hypomanic

A Currently (or most recently) in a Hypomanic Episode (see Criteria for Hypomanic Episode).

B There has previously been at least one Manic Episode (see Criteria for Manic Episode) or Mixed Episode (see Criteria for Mixed Episode).

C The mood symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D The mood episodes in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

Diagnostic criteria for 296.4x Bipolar I Disorder, Most Recent Episode Manic

A Currently (or most recently) in a Manic Episode (see Criteria for Manic Episode).

B There has previously been at least one Major Depressive Episode (see Criteria for Major Depressive Episode), Manic Episode (see Criteria for Manic Episode), or Mixed Episode (see Criteria for Mixed Episode).

C The mood episodes in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

Diagnostic criteria for 296.6x Bipolar I Disorder, Most Recent Episode Mixed

A Currently (or most recently) in a Mixed Episode (see Criteria for Mixed Episode).

B There has previously been at least one Major Depressive Episode (see Criteria for Major Depressive Episode), Manic Episode (see Criteria for Manic Episode), or Mixed Episode (see Criteria for Mixed Episode).

C The mood episodes in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

Diagnostic criteria for 296.5x Bipolar I Disorder, Most Recent Episode Depressed

A Currently (or most recently) in a Major Depressive Episode (see Criteria for Major Depressive Episode).

B There has previously been at least one Manic Episode (see Criteria for Manic Episode) or Mixed Episode (see Criteria for Mixed Episode).

C The mood episodes in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

Diagnostic criteria for 296.7 Bipolar I Disorder, Most Recent Episode Unspecified

A Criteria, except for duration, are currently (or most recently) met for a Manic (see Criteria for Manic Episode), a Hypomanic (see Criteria for Hypomanic Episode), a Mixed (see Criteria for Mixed Episode), or a Major Depressive Episode (see Criteria for Major Depressive Episode).

B There has previously been at least one Manic Episode (see Criteria for Manic Episode) or Mixed Episode (see Criteria for Mixed Episode).

C The mood symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D The mood symptoms in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

E The mood symptoms in Criteria A and B are not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism).

Diagnostic criteria for 296.89 Bipolar II Disorder

A Presence (or history) of one or more Major Depressive Episodes (see Criteria for Major Depressive Episode).

B Presence (or history) of at least one Hypomanic Episode (see Criteria for Hypomanic Episode).

C There has never been a Manic Episode (see Criteria for Manic Episode) or a Mixed Episode (see Criteria for Mixed Episode).

D The mood symptoms in Criteria A and B are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

E The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specifiers of severity

In Major Depressive Disorder, these specifiers indicate either the severity of the current Major Depressive Episode or the level of remission if full criteria are no longer met. In Bipolar I and Bipolar II Disorder, these specifiers indicate either the severity of the current Major Depressive Episode or the level of remission if the most recent episode was a Major Depressive Episode. If criteria are currently met for the Major Depressive Episode, it can be classified as Mild, Moderate, Severe Without Psychotic Features, or Severe With Psychotic Features. If the criteria are no longer met, the specifier indicates whether the most recent Major Depressive Episode is in partial or full remission.

.x1—Mild: Few, if any, symptoms in excess of those required to make the diagnosis and symptoms result in only minor impairment in occupational functioning or in usual social activities or relationships with others.

.x2—Moderate: Symptoms or functional impairment between ‘mild’ and ‘severe’.

.x3—Severe Without Psychotic Features: Several symptoms in excess of those required to make the diagnosis, and symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

.x4—Severe With Psychotic Features: Delusions or hallucinations. If possible, specify whether the psychotic features are mood-congruent or mood-incongruent:

Mood-Congruent Psychotic Features: Delusions or hallucinations whose content is entirely consistent with the typical depressive themes of personal inadequacy, guilt, disease, death, nihilism, or deserved punishment.

Mood-Incongruent Psychotic Features: Delusions or hallucinations whose content does not involve typical depressive themes of personal inadequacy, guilt, disease, death, nihilism, or deserved punishment. Included are such symptoms as persecutory delusions (not directly related to depressive themes), thought insertion, thought broadcasting, and delusions of control.

.x5—In Partial Remission: Symptoms of a Major Depressive Episode are present but full criteria are not met, or there is a period without any significant symptoms of a Major Depressive Episode lasting less than 2 months following the end of the Major Depressive Episode. (If the Major Depressive Episode was superimposed on Dysthymic Disorder, the diagnosis of Dysthymic Disorder alone is given once the full criteria for a Major Depressive Episode are no longer met.)

.x6—In Full Remission: During the past 2 months, no significant signs or symptoms of the disturbance were present.

.x0—Unspecified.

ICD-10 categories

Mood [affective] disorders

This block of the ICD-10 contains disorders in which the fundamental disturbance is a change in affect or mood to depression (with or without associated anxiety) or to elation. The mood change is usually accompanied by a change in the overall level of activity; most of the other symptoms are either secondary to, or easily understood in the context of, the change in mood and activity. Most of these disorders tend to be recurrent and the onset of individual episodes can often be related to stressful events or situations.

Table A4.1 ICD mood (affective disorders) (F30–F39)

F30	**Manic episode**
	All the subdivisions of this category should be used only for a single episode. Hypomanic or manic episodes in individuals who have had one or more previous affective episodes (depressive, hypomanic, manic, or mixed) should be coded as bipolar affective disorder. *Includes:* bipolar disorder, single manic episode
F30.0	**Hypomania**
	A disorder characterised by a persistent mild elevation of mood, increased energy and activity, and usually marked feelings of wellbeing and both physical and mental efficiency. Increased sociability, talkativeness, over-familiarity, increased sexual energy, and a decreased need for sleep are often present but not to the extent that they lead to severe disruption of work or result in social rejection. Irritability, conceit, and boorish behaviour may take the place of the more usual euphoric sociability. The disturbances of mood and behaviour are not accompanied by hallucinations or delusions.
F30.1	**Mania without psychotic symptoms**
	Mood is elevated out of keeping with the patient's circumstances and may vary from carefree joviality to almost uncontrollable excitement. Elation is accompanied by increased energy, resulting in overactivity, pressure of speech, and a decreased need for sleep. Attention cannot be sustained, and there is often marked distractibility. Self-esteem is often inflated with grandiose ideas and overconfidence. Loss of normal social inhibitions may result in behaviour that is reckless, foolhardy, or inappropriate to the circumstances, and out of character.

F30.2	**Mania with psychotic symptoms**
	In addition to the clinical picture described in F30.1, delusions (usually grandiose) or hallucinations (usually of voices speaking directly to the patient) are present, or the excitement, excessive motor activity, and flight of ideas are so extreme that the subject is incomprehensible or inaccessible to ordinary communication. Mania with: – mood-congruent psychotic symptoms – mood-incongruent psychotic symptoms Manic stupor
F30.8	**Other manic episodes**
F30.9	**Manic episode, unspecified** Mania not otherwise specified
F31	**Bipolar affective disorder**
	A disorder characterised by two or more episodes in which the patient's mood and activity levels are significantly disturbed, this disturbance consisting on some occasions of an elevation of mood and increased energy and activity (hypomania or mania) and on others of a lowering of mood and decreased energy and activity (depression). Repeated episodes of hypomania or mania only are classified as bipolar. *Includes:* manic-depressive: – illness – psychosis – reaction *Excludes:* bipolar disorder, single manic episode (F30.-) cyclothymia (F34.0)
F31.0	**Bipolar affective disorder, current episode hypomanic**
	The patient is currently hypomanic, and has had at least one other affective episode (hypomanic, manic, depressive, or mixed) in the past.
F31.1	**Bipolar affective disorder, current episode manic without psychotic symptoms**
	The patient is currently manic, without psychotic symptoms (as in F30.1), and has had at least one other affective episode (hypomanic, manic, depressive, or mixed) in the past.
F31.2	**Bipolar affective disorder, current episode manic with psychotic symptoms**
	The patient is currently manic, with psychotic symptoms (as in F30.2), and has had at least one other affective episode (hypomanic, manic, depressive, or mixed) in the past.
F31.3	**Bipolar affective disorder, current episode mild or moderate depression**
	The patient is currently depressed, as in a depressive episode of either mild or moderate severity (F32.0 or F32.1), and has had at least one authenticated hypomanic, manic, or mixed affective episode in the past.
F31.4	**Bipolar affective disorder, current episode severe depression without psychotic symptoms**
	The patient is currently depressed, as in severe depressive episode without psychotic symptoms (F32.2), and has had at least one authenticated hypomanic, manic, or mixed affective episode in the past.
F31.5	**Bipolar affective disorder, current episode severe depression with psychotic symptoms**
	The patient is currently depressed, as in severe depressive episode with psychotic symptoms (F32.3), and has had at least one authenticated hypomanic, manic, or mixed affective episode in the past.

F31.6	**Bipolar affective disorder, current episode mixed**
	The patient has had at least one authenticated hypomanic, manic, depressive, or mixed affective episode in the past, and currently exhibits either a mixture or a rapid alteration of manic and depressive symptoms. *Excludes:* single mixed affective episode (F38.0)
F31.7	**Bipolar affective disorder, currently in remission**
	The patient has had at least one authenticated hypomanic, manic, or mixed affective episode in the past, and at least one other affective episode (hypomanic, manic, depressive, or mixed) in addition, but is not currently suffering from any significant mood disturbance, and has not done so for several months. Periods of remission during prophylactic treatment should be coded here.
F31.8	**Other bipolar affective disorders**
	Bipolar II disorder Recurrent manic episodes not otherwise specified
F31.9	**Bipolar affective disorder, unspecified**
F32	**Depressive episode**
	In typical mild, moderate, or severe depressive episodes, the patient suffers from lowering of mood, reduction of energy, and decrease in activity. Capacity for enjoyment, interest, and concentration is reduced, and marked tiredness after even minimum effort is common. Sleep is usually disturbed and appetite diminished. Self-esteem and self-confidence are almost always reduced and, even in the mild form, some ideas of guilt or worthlessness are often present. The lowered mood varies little from day to day, is unresponsive to circumstances and may be accompanied by so-called 'somatic' symptoms, such as loss of interest and pleasurable feelings, waking in the morning several hours before the usual time, depression worst in the morning, marked psychomotor retardation, agitation, loss of appetite, weight loss, and loss of libido. Depending upon the number and severity of the symptoms, a depressive episode may be specified as mild, moderate or severe. *Includes:* single episodes of: – depressive reaction – psychogenic depression – reactive depression *Excludes:* adjustment disorder (F43.2) recurrent depressive disorder (F33.-) when associated with conduct disorders in F91.- (F92.0)
F32.0	**Mild depressive episode**
	Two or three of the above symptoms are usually present. The patient is usually distressed by these but will probably be able to continue with most activities.
F32.1	**Moderate depressive episode**
	Four or more of the above symptoms are usually present and the patient is likely to have great difficulty in continuing with ordinary activities.
F32.2	**Severe depressive episode without psychotic symptoms**
	An episode of depression in which several of the above symptoms are marked and distressing, typically loss of self-esteem and ideas of worthlessness or guilt. Suicidal thinking and acts are common and a number of 'somatic' symptoms are usually present. Agitated depression } Major depression } single episode without psychotic symptoms Vital depression }

F32.3	**Severe depressive episode with psychotic symptoms**
	An episode of depression as described in F32.2, but with the presence of hallucinations, delusions, psychomotor retardation, or stupor so severe that ordinary social activities are impossible; there may be danger to life from suicide, dehydration, or starvation. The hallucinations and delusions may or may not be mood-congruent. Single episodes of: – major depression with psychotic symptoms – psychogenic depressive psychosis – psychotic depression – reactive depressive psychosis
F32.8	**Other depressive episodes**
	Atypical depression Single episodes of 'masked' depression not otherwise specified
F32.9	**Depressive episode, unspecified**
	Depression not otherwise specified Depressive disorder not otherwise specified
F33	**Recurrent depressive disorder**
	A disorder characterised by repeated episodes of depression as described for depressive episode (F32.-), without any history of independent episodes of mood elevation and increased energy (mania). There may, however, be brief episodes of mild mood elevation and overactivity (hypomania) immediately after a depressive episode, sometimes precipitated by antidepressant treatment. The more severe forms of recurrent depressive disorder (F33.2 and F33.3) have much in common with earlier concepts such as manic-depressive depression, melancholia, vital depression and endogenous depression. The first episode may occur at any age from childhood to old age, the onset may be either acute or insidious, and the duration varies from a few weeks to many months. The risk that a patient with recurrent depressive disorder will have an episode of mania never disappears completely, however many depressive episodes have been experienced. If such an episode does occur, the diagnosis should be changed to bipolar affective disorder (F31.-). *Includes:* recurrent episodes of: – depressive reaction – psychogenic depression – reactive depression seasonal depressive disorder *Excludes:* recurrent brief depressive episodes (F38.1)
F33.0	**Recurrent depressive disorder, current episode mild**
	A disorder characterised by repeated episodes of depression, the current episode being mild, as in F32.0, and without any history of mania.
F33.1	**Recurrent depressive disorder, current episode moderate**
	A disorder characterised by repeated episodes of depression, the current episode being of moderate severity, as in F32.1, and without any history of mania.

F33.2	**Recurrent depressive disorder, current episode severe without psychotic symptoms**
	A disorder characterised by repeated episodes of depression, the current episode being severe without psychotic symptoms, as in F32.2, and without any history of mania. Endogenous depression without psychotic symptoms Major depression, recurrent without psychotic symptoms Manic-depressive psychosis, depressed type without psychotic symptoms Vital depression, recurrent without psychotic symptoms
F33.3	**Recurrent depressive disorder, current episode severe with psychotic symptoms**
	A disorder characterised by repeated episodes of depression, the current episode being severe with psychotic symptoms, as in F32.3, and with no previous episodes of mania. Endogenous depression with psychotic symptoms Manic-depressive psychosis, depressed type with psychotic symptoms Recurrent severe episodes of: – major depression with psychotic symptoms – psychogenic depressive psychosis – psychotic depression – reactive depressive psychosis
F33.4	**Recurrent depressive disorder, currently in remission**
	The patient has had two or more depressive episodes as described in F33.0–F33.3, in the past, but has been free from depressive symptoms for several months.
F33.8	**Other recurrent depressive disorders**
F33.9	**Recurrent depressive disorder, unspecified**
	Monopolar depression not otherwise specified
F34	**Persistent mood [affective] disorders**
	Persistent and usually fluctuating disorders of mood in which the majority of the individual episodes are not sufficiently severe to warrant being described as hypomanic or mild depressive episodes. Because they last for many years, and sometimes for the greater part of the patient's adult life, they involve considerable distress and disability. In some instances, recurrent or single manic or depressive episodes may become superimposed on a persistent affective disorder.
F34.0	**Cyclothymia**
	A persistent instability of mood involving numerous periods of depression and mild elation, none of which is sufficiently severe or prolonged to justify a diagnosis of bipolar affective disorder (F31.-) or recurrent depressive disorder (F33.-). This disorder is frequently found in the relatives of patients with bipolar affective disorder. Some patients with cyclothymia eventually develop bipolar affective disorder. Affective personality disorder Cycloid personality Cyclothymic personality

F34.1	**Dysthymia**
	A chronic depression of mood, lasting at least several years, which is not sufficiently severe, or in which individual episodes are not sufficiently prolonged, to justify a diagnosis of severe, moderate, or mild recurrent depressive disorder (F33.-). Depressive: – neurosis – personality disorder Neurotic depression Persistent anxiety depression *Excludes:* anxiety depression (mild or not persistent) (F41.2)
F34.8	**Other persistent mood [affective] disorders**
F34.9	**Persistent mood [affective] disorder, unspecified**
F38	**Other mood [affective] disorders**
	Any other mood disorders that do not justify classification to F30–F34, because they are not of sufficient severity or duration.
F38.0	**Other single mood [affective] disorders**
	Mixed affective episode
F38.1	**Other recurrent mood [affective] disorders**
	Recurrent brief depressive episodes
F38.8	**Other specified mood [affective] disorders**
F39	**Unspecified mood [affective] disorder**
	Affective psychosis not otherwise specified

5 Examples of validated assessment tools

Tool	Type	Measures	Main features
Beck Depression Inventory (BDI) (Beck et al 1961)	Multiple-choice self-report scale Used in those aged over 13 years	Cognitive, behavioural, affective, and somatic	Discriminates between depressed and non-depressed teenagers with good sensitivity and specificity No items relevant to school No parent or teacher rating forms
Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff 1977)	Self-report scale Used in those aged over 13 years	Depressive mood; feelings of guilt and worthlessness; psychomotor retardation; loss of appetite; sleep disturbance	A valuable tool for identifying a group at risk of depression and for studying the relationship between depressive symptoms and other variables Discriminant validity tests found CES-D to be less successful in differentiating between depression and other types of emotional responses (anger, fear, boredom)
Children's Depression Inventory (CDI) (Kovacs & Beck 1977; Kovacs 1981)	Self-report scale Used in children aged 7 to 17 years	Dysphoric mood; acting out; loss of personal and social interest; self-deprecation; vegetative symptoms	Most frequently used and best studied scale for depression in children Response format comparing three choices may not be suitable for some children Discriminant validity poor with a high false negative rate
Hamilton Rating Scale for Depression (HRSD) (Hamilton 1960)	Clinician-rated multiple-choice scale used to rate severity of depression	Rates the severity of symptoms observed in depression such as low mood, insomnia, agitation, anxiety and weight loss	Excellent internal reliability and interrater reliability, some discriminant validity Further assessment of psychometric functioning is needed to assure suitability for teenagers Emphasis on somatic and anxiety symptoms may mean poor discrimination from anxiety disorders
HANDS (Baer et al 2000)	Self-report scale	Signs and symptoms of depression in the last 2 weeks	Good internal consistency and validity Adult scale
Hospital Anxiety and Depression Scale (HADS) (Snaith 2003)	Self-report scale	Severity of depression and generalised anxiety	Adequate test-retest reliability and factor structure No physical items, may be more useful for individuals with co-occurring medical conditions
Reynolds Adolescent Depression Scale (RADS) (Reynolds 2002)	Used for adolescents aged 12 years and above	Dysphoric mood, anhedonia/negative affect, negative self-evaluation, somatic complaints	Demonstrated reliability and validity Well suited for individual or group assessment in clinical or school situations
Reynolds Child Depression Scale (RCDS) (Reynolds 1989)	Self-report scale Used for children	Depression symptoms	Demonstrated reliability and validity Can be used in schools or clinical settings

Semi-structured scales/interviews

Examples include:

- Kiddie-Schedule for Affective Disorders and Schizophrenia (Chambers et al 1985);
- Diagnostic Interview for Children and Adolescents-IV (DICA-IV) (Reich 2000);
- Clinical Interview Schedule-revised (CIS-R) (Lewis et al 1992); and
- Structured Clinical Interview for DSM-IV Axis I disorder clinician version (SCI-D) (First 1996) and patient version (SCID-I/P) (First 2002).

Measures of broader mental health problems or associated symptoms

Examples include:

- Strengths and Difficulties Questionnaire (SDQ) (Goodman et al 2003);
- K6/K10 (Kessler et al 2002);
- Child Behaviour Checklist (CBCL) (Clarke et al 1992); and
- Youth Self Report (Achenbach & Roscorla 2001).

6 Further resources

Resources for health professionals

headspace Knowledge Centre

www.headspace.org.au/knowledge-centre/
The headspace Knowledge Centre provides up-to-date information about treatment interventions and models of care for young people with mental health and substance use issues. It is designed for professionals who work with young people, as well as researchers and academics and members of the community who are interested in youth mental health. Resources include evidence summaries and Mythbusters.

The Black Dog Institute

www.blackdoginstitute.org.au/healthprofessionals/index.cfm
The Black Dog Institute is a not-for-profit, educational, research, clinical and community-oriented facility offering specialist expertise in depression and bipolar disorder. It offers education and training programs, resources and online learning for health professionals.

square – Suicide, QUestions, Answers and REsources

www.square.org.au/
square is an integrated suicide prevention resource developed by General Practice SA and Relationships Australia (SA) in conjunction with the Federal and State Governments. It is part of the National Suicide Prevention Strategy and was jointly funded by the Australian Government and the Government of South Australia.

Living is for Everyone

www.livingisforeveryone.com.au/
The Living Is For Everyone (LIFE) website is a suicide and self-harm prevention resource, dedicated to providing the best available evidence and resources to guide activities aimed at reducing the rate at which people take their lives in Australia. The LIFE website is designed for people across the community who are involved in suicide and self-harm prevention activities.

Psych Support

The GP Psych Support service provides GPs with patient management advice from psychiatrists within 24 hours. GP Psych Support provides advice in the following areas of psychiatry:

- general adult psychiatry;
- child and adolescent psychiatry;
- old age psychiatry; and
- drug and alcohol psychiatry.

www.psychsupport.com.au

Free Phone: 1800 200 588. You will be asked some brief questions concerning your enquiry and a psychiatrist will call you back within 24 hours.

Free Fax: 1800 012 422. Using the faxback form provide details regarding the issue for discussion. A psychiatrist will then fax or phone you to discuss case details.

Email: Psychsupport is a secure and password protected website. Log in and submit your questions online. For your username and password, call 1800 200 588.

Mental Health First Aid

www.mhfa.com.au/
Mental Health First Aid is an example of a training course to help people identify others with mental health issues.

Australian guidelines on lifestyle issues

Diet

The **NHMRC dietary guidelines** — for adults and for children and adolescents — are based on the best available scientific evidence and provide information for health professionals and the general population about healthy food choices. The use of the guidelines will encourage healthy lifestyles that will minimise the risk of the development of diet-related diseases within the Australian population.

The dietary guidelines highlight the groups of foods and lifestyle patterns that promote good nutrition and health. They are no longer listed by number as no guideline is considered more important than another. Each guideline deals with a key health issue.

Available at: **www.nhmrc.gov.au/publications/synopses/dietsyn.htm**

Physical activity

The **National Physical Activity Guidelines for Australians** outline the minimum levels of physical activity required to gain a health benefit and ways to incorporate incidental physical activity into everyday life.

Available at: **www.australiantransplantauthority.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines**

Alcohol

The **NHMRC alcohol guidelines** aim to establish the evidence base for future policies and community materials on reducing the health risks that arise from drinking alcohol. The guidelines communicate evidence concerning these risks to the Australian community to allow individuals to make informed decisions regarding the amount of alcohol that they choose to drink.

Available at: **www.nhmrc.gov.au/publications/synopses/ds10syn.htm**

The **guidelines for the treatment of alcohol problems** provide up-to-date, evidence-based information to health professionals on treatments for people with alcohol problems. The guidelines are directed to the broad range of healthcare professionals who treat people with these problems and include a comprehensive review of treatment options. The guidelines do not provide advice on methods of treatment delivery and it is noted that some treatments will not be suitable for all populations and settings.

Available at: **www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/treat-guide**

The **alcohol treatment guidelines for Indigenous Australians** have been developed to give guidance to healthcare providers working with Indigenous clients who are adversely affected by alcohol consumption. The guidelines are designed to be a reliable source of information and direction that has sufficient flexibility for appropriate situational adjustment.

Available at: **www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/AGI02**

Smoking

The **smoking cessation guidelines for Australian general practice** include information that general practitioners and other practice staff can apply to identify smokers and assist them to quit.

Available at: **www.australiantransplantauthority.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-publicat-document-smoking_cessation-cnt.htm**

Support for consumers

beyondblue

Info line 1300 22 4636
www.beyondblue.org.au
www.youthbeyondblue.com
Information on depression, anxiety and related disorders, available treatments and referral only (local call)

Black Dog Institute

www.blackdoginstitute.org.au
Information on depression (including during and after pregnancy) and bipolar disorder – specifically causes, treatments, symptoms, getting help and current research findings

Carers Australia

1800 242 636
www.carersaustralia.com.au
Family carer support and counselling in each State and Territory

CRUfAD

www.crufad.org
Information and internet-based education and treatment programs for people with depression or anxiety

e-couch

www.ecouch.anu.edu.au/
Online psychological therapy

headspace

www.headspace.org.au
Information on mental health problems and stories from others, plus local services for young people

Kids Help Line

1800 55 1800
www.kidshelp.com.au
Free call from a land line; 24 hours. Website lists services that are either free of charge or low cost

Lifeline

13 11 14
24-hour counselling, information and referral (local call)

MoodGYM

www.moodgym.anu.edu.au
Online psychological therapy

Multicultural Mental Health Australia

(02) 9840 3333
www.mmha.org.au
Mental health information for people from culturally diverse backgrounds

Reach Out

www.reachout.com
Information and support for young people going through tough times

Relationships Australia

1300 364 277
www.relationships.com.au
Support and counselling for relationships

SANE Australia Helpline

1800 18 7263
www.sane.org
Information about mental illness, treatments, where to go for support and help for carers

Suicide Call Back Service

1300 659 467
Telephone support for those at risk of suicide, their carers, and those bereaved by suicide

Abbreviations and acronyms

AACAP	American Academy of Child and Adolescent Psychiatry
ABS	Australian Bureau of Statistics
ADHD	attention deficit hyperactivity disorder
ADRAC	Adverse Drug Reactions Advisory Committee
AHMAC	Australian Health Ministers' Advisory Council
AHTA	Adelaide Health Technology Assessment
AIHW	Australian Institute of Health and Welfare
BDI	Beck Depression Inventory
CAMHS	Child and Adolescent Mental Health Service
CANMAT	Canadian Network for Mood and Anxiety Treatments
CBCL	Child Behaviour Checklist
CBT	cognitive behavioural therapy
CDI	Children's Depression Inventory
CES-D	Center for Epidemiologic Studies Depression Scale
DALY	disability-adjusted life years
DICA-IV	Diagnostic Interview for Children and Adolescents-IV
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, text revision
ECT	electroconvulsive therapy
EWS	early warning signs and symptoms
FDA	US Food and Drug Administration
GP	general practitioner
GPP	good practice point
HADS	Hospital Anxiety and Depression Scale
HRSD	Hamilton Rating Scale for Depression
ICD	International Classification of Diseases
IPT	Interpersonal psychotherapy
ISBD	International Society for Bipolar Disorders
MeSH	medical subject headings
NHMRC	National Health and Medical Research Council
NICE	National Institute for Health and Clinical Excellence (UK)
NSPS	National Suicide Prevention Strategy
NST	non-directive supportive therapy
QALY	quality-adjusted life years
RACP	Royal Australian College of Physicians
RADS	Reynolds Adolescent Depression Scale
RCDS	Reynolds Child Depression Scale
RCT	randomised controlled trial
RIMA	reversible inhibitor of monoamine oxidase
SBFT	systemic-behavioural family therapy
SDQ	Strengths and Difficulties Questionnaire
SIGN	Scottish Intercollegiate Guidelines Network
SLR	systematic literature review
SNRI	serotonin-norepinephrine reuptake inhibitor
SSRI	selective serotonin reuptake inhibitor
TAD	Treatment for Adolescents with Depression
TAU	treatment as usual
TCA	tricyclic antidepressants
TMS	transcranial magnetic stimulation
UK	United Kingdom
US	United States
VCFS	Velocardiofacial Syndrome
VMACGLBTIHW	Victorian Ministerial Advisory Committee on Gay, Lesbian, Bisexual, Transgender and Intersex Health and Wellbeing
WASC-Y	Westerman Aboriginal Symptom Checklist — Youth
WHO	World Health Organization

Glossary of terms

Aboriginal and Torres Strait Islander peoples: It is recognised that there is no single Aboriginal or Torres Strait Islander culture or group, but numerous groupings, languages, kinships, and tribes, as well as ways of living. Furthermore, Aboriginal and Torres Strait Islander peoples may currently live in urban, rural or remote settings, in urbanised, traditional or other lifestyles, and frequently move between these ways of living.

Affective disorder: A mental disorder characterised by a consistent, pervasive alteration in mood, and affecting thoughts, emotions, and behaviours (also called mood disorder).

Anhedonia: Loss of the capacity to experience pleasure. The inability to gain pleasure from normally pleasurable experiences.

Antidepressant: A psychotropic medication used to treat mood disorders, such as major depression and dysthymia.

Attributional style: A cognitive attribute that indicates how people explain to themselves why they experience a particular event, either positive or negative.

Behavioural therapy: Psychological therapy that focuses on training individuals to replace undesirable behaviours with healthier behavioural patterns.

Bibliotherapy: An expressive therapy that uses an individual's relationship to the content of books and poetry and other written words as therapy.

Biopsychosocial: Consideration of biological (e.g. genetic), psychological (e.g. thoughts and behaviours) and social (e.g. context and environment).

Bipolar disorder: Describes a category of mood disorders defined by the presence of one or more episodes of abnormally elevated mood clinically referred to as mania or, if milder, hypomania. Individuals who experience manic episodes also commonly experience depressive episodes or symptoms, or mixed episodes in which features of both mania and depression are present at the same time.

Cognitive behavioural therapy: Psychological therapy based on the assumption that faulty thinking patterns, maladaptive behaviours and 'negative' emotions are all inter-related. Treatment focuses on changing an individual's thoughts (cognitive patterns) or maladaptive behaviours in order to change emotional states. Cognitive behavioural therapy integrates the cognitive restructuring approach of cognitive therapy with the behavioural modification techniques of behavioural therapy.

Cognitive therapy: Psychological therapy based on the assumption that maladaptive behaviours and disturbed mood or emotions are the result of inappropriate or irrational thinking patterns. Cognitive therapists attempt to assist people to become aware of these thinking patterns and change them, using a process termed cognitive restructuring.

Content validity: The ability of the instrument to characterise the symptoms that occur within the disorder.

Control group: A group of individuals in a study who do not receive the active treatment and are compared to those who do.

Co-occurring conditions: The co-occurrence of two or more disorders, such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.

Criterion validity: The ability of the instrument to 'find' the cases of interest in the population being examined.

Culturally and linguistically diverse: The wide range of cultural groups that make up the Australian population and Australian communities. The term acknowledges that groups and individuals differ according to religion and spirituality, racial background, ethnicity and language, and reflects intergenerational and contextual issues, not just migrant experience.

Cultural safety: The experience of the recipient of care; it is comparable to clinical safety.

Depressive disorder: Defined according to clinically derived standard psychiatric diagnostic criteria (e.g. DSM-IV) and involving a constellation of disturbances in emotional, behavioural, somatic and cognitive functioning.

Depressive symptoms: A range of emotional, cognitive, behavioural and physical changes that, when numerous or severe, may indicate the presence of a depressive disorder. Common depressive symptoms are listed in Table A2.1.

Depressive syndrome: A set of co-occurring depressive and other emotional symptoms.

Dysthymia: Chronic mild depression, with symptoms of altered mood present for more days than not for at least 1 year in adolescents.

Dysphoria: An uncomfortable feeling or mood (e.g. sadness) that may be experienced in response to ordinary life events, such as illness or grief, or as part of a depressive disorder.

Effectiveness: Effectiveness is the extent to which a specific intervention or treatment produces a beneficial effect in routine circumstances (e.g. clinical practice) and that the effect is as intended for the specified population.

Efficacy: Efficacy is the extent to which a specific intervention or treatment produces a beneficial effect under ideal (e.g. controlled research) conditions.

Empirically tested: Interventions tested in clinical trials.

Euthymia: Indicates a normal non-depressed, reasonably positive mood.

Extra-pyramidal side effects: The acute adverse effects of neuroleptic medications for mania; these include dystonias (prolonged and unintentional muscular contractions of voluntary or involuntary muscles), parkinsonism (e.g. tremor, rigidity) and akathisia (pacing or rocking).

Family-focused intervention: A branch of psychotherapy that works with families to nurture change and development. It tends to view change in terms of the systems of interaction between family members. It emphasises family relationships as an important factor in psychological health.

Good practice point: For the purposes of these Guidelines, these are points of advice that are based on lower quality evidence than is required for recommendations and/or best practice clinical judgement.

Good standard of care: In the context of mental health care, includes elements such as establishing a therapeutic relationship, talking about symptoms and problems and maintaining contact, with the aim and expectation of collaboration to resolve problems. Usual care is also used to describe a control group in a clinical research study that receives standard therapy rather than the intervention being tested.

Hypersomnia: A disorder characterised by excessive amounts of sleepiness.

Hypomania: A mood state characterised by persistent and pervasive elevated or irritable mood, and thoughts and behaviours consistent with that mood. Unlike **mania,** there are no psychotic symptoms and there is less impact on functioning.

Interpersonal psychotherapy: A short-term supportive psychotherapy that focuses on the connection between interactions between people and the development of psychological disorder symptoms. Symptoms and personal difficulties are regarded as arising from deep, unresolved personality or character problems. Goals are rapid symptom reduction and improved social adjustment.

Indicated prevention: Interventions targeted towards high-risk individuals based on minimal but detectable symptoms that could later develop into a syndromal mental health disorder.

Mania: A state of abnormally elevated or irritable mood, arousal and/or energy levels, which is a criterion for certain psychiatric diagnoses.

Mental health: A state of emotional and social wellbeing in which the individual can cope with the normal stresses of life and achieve his or her potential, including being able to work productively and contribute to community life.

Mental health literacy: Knowledge and beliefs about mental disorders that aid their recognition, management or prevention. Mental health literacy includes the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking.

Mental health problems: Diminished cognitive, emotional or social abilities but not to the extent that the criteria for a mental illness are met.

Mental health professional: A health professional with expertise in providing mental health care, such a psychiatrist, psychologist, GP or mental health nurse. Other professionals (e.g. physicians, social workers) may also have mental health care expertise.

Mental illness: The term mental illness is synonymous with mental health disorder. A mental illness is a clinically diagnosable disorder that significantly interferes with an individual's cognitive, emotional or social abilities. The diagnosis of mental illness is generally made according to the classification systems of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) or the International Classification of Diseases (ICD-10).

Meta-analysis: A statistical procedure that creates a single conclusion from a combination of many studies.

Monitoring condition: In a therapy outcome study, a group of people that function as a control group while an experimental group receives an intervention. The control group is monitored regularly for depressive symptoms and functioning.

Newer pharmacological agents: Newer agents used to treat depression include serotonin-norepinephrine reuptake inhibitors (SNRIs) (e.g. venlafaxine, duloxetine, desvenlafaxine), selective norepinephrine reuptake inhibitors (e.g. reboxetine), tetracyclic antidepressants (e.g. mirtazepine) and agomelatine.

Non-directive support: Psychosocial support involving active listening, person-centred discussions, and empathy.

Odds ratio: The ratio of the probability of an event occurring in one group to the probability of it occurring in another group, or to a sample-based estimate of that ratio. An odds ratio of 1 indicates that the condition or event is equally likely in both groups. An odds ratio of less than 1 indicates that the condition or event is less likely in the first group.

Oppositional defiant disorder: A childhood mental disorder characterised by a pattern of disobedient, hostile and defiant behaviour towards authority figures.

Placebo: A sham medical intervention (e.g. inert sugar pill, usual care, wait-list control). The placebo effect is the measurable, observable, or felt improvement in health or behaviour not attributable to a medication or invasive treatment that has been administered.

Psychoeducation: Education offered to people with depressive symptoms or a mental health disorder, often involving the family, with the goal of assisting them to understand and be better able to deal with the presented illness.

Pscyhopathology: A term that can be used to denote behaviours or experiences that are indicative of mental illness, whether or not they fulfil diagnostic criteria for a disorder.

Psychometric properties: A descriptor often relating to depression rating scales, includes how valid and reliable the measure is, and therefore how useful the measure is in a research and/or clinical context.

Psychosocial: Refers to the various psychological (e.g. cognitive and behavioural) and social (e.g. social network, economic) factors that may predispose to, precipitate or perpetuate depression, distress or dysfunction.

Psychosocial intervention: Interventions that target psychosocial risk and protective factors.

Psychological therapy/intervention: A general term for a process of treating mental and emotional disorders through an intentional interpersonal relationship used by trained psychotherapists to aid people in the problems of living.

Psychotherapy: see *Psychological therapy/intervention*.

Recurrence: A depressive episode occurring after a sustained period of complete remission (onset of second or subsequent depressive episode).

Relapse: A depressive episode occurring within 6–9 months of treatment response (re-emergence of the treated depressive episode).

Remission of symptoms: Virtually complete relief of symptoms and return to full functioning in all areas of life.

SSRI discontinuation syndrome: The abrupt onset of characteristic symptoms within days of stopping an SSRI.

Statistical power: The probability that the test will reject the null hypothesis when the alternative hypothesis is true.

Selective prevention: Programs specifically targeted at individuals or groups believed to be a higher risk of developing a mental health disorder (e.g. adolescents with a depressed parent, or who have experienced a bereavement or parental divorce).

Subsyndromal: Exhibiting symptoms that do not meet defined diagnostic criteria for a clinically recognised syndrome.

Syndromal: Characterised by or exhibiting symptoms that meet defined diagnostic criteria for a clinically recognised syndrome.

Systematic literature review: A literature review focused on a single question that tries to identify, appraise, select and synthesise all high quality research evidence relevant to that question.

Therapeutic relationship: The means by which the health professional hopes to engage with and facilitate therapeutic change in a patient. It involves a collaborative process with active listening, setting mutually agreed treatment goals and tasks and establishing the trust and confidence that will help the patient to achieve those goals.

Universal prevention: Interventions directed at entire populations regardless of exposure to risk factors or the presence or absence of signs or symptoms of mental health disorder.

Usual curriculum: Used to describe a control group in school-based research studies; e.g. the effects of a prevention intervention may be tested by being compared with the existing mental health curriculum in a school.

Wait-list control: In a therapy outcome study, a group of people that functions as a control group while an experimental group receives an intervention. The control group later receives the intervention after a waiting period, usually when the study is completed.

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